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ABSTRACT

The evaluation of the effectiveness of the classes for persons convicted of driving while intoxicated was based largely on analyses of verbal behaviors of participants and instructors, using the psychosocial theories of Erik Erikson. The established goals of the course emphasize that the information must be dealt with in a group situation where facts, ideas, feelings, and perceptions can be mulled over in give-and-take interactions. Ten representative classes were selected for this study. Separate chapters cover teacher roles, participant-instructor verbal interaction and adaptive behavior, teaching style and the resolution of group conflict, developmental phases of successive class sessions, and instructional work and emotional response. Each chapter has a section explaining the theoretical framework, the methodology, the findings, and their interpretation. The final chapter presents the conclusions that in general the instructors were not sufficiently effective in bringing about the emotional involvement of the participants that would have been required to bring about effective attitude and behavior changes. Recommendations are made for improving the program. (Author/CTM)

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ED187735

A REPORT
ON AN EVALUATION STUDY
OF THE
GROUP DYNAMICS
TRAFFIC SAFETY SCHOOL
STATE OF WISCONSIN

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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FOREWARD

The State can take two courses of action with drunk drivers. Punishment is one course of action; education is the other. This report is an evaluation study of a program for OWI offenders that has been based on education as the course of action.

Education has frequently been used by society to advance the goals that society wanted to achieve and to resolve the problems that society encountered. Although there are some people who are critical and skeptical of education's positive impact on society no student of history can take such criticisms seriously. Education can make a difference. The issue is not one of whether it can make a difference but what is the nature and quality of that difference.

There is a long tradition of evaluating the nature and quality of that difference. But there is another side to the question that is not solely centered on the outcomes of education. This side of the issue focuses on the modes of instruction which are employed to reach educational goals. The study of instruction has clearly demonstrated that it is primary to any study of educational outcomes.

The evaluation study reported on here is an indepth examination of certain basic aspects of instruction. The purposes and structure of the educational program were the primary considerations for the selection of the basic aspects of instruction that were examined.

Several persons played a key role in initiating the need for an evaluation study of the Group Dynamics program. Among these were William Richards, Alcohol/Driver Education Supervisor, Department of Public Instruction, Don Gehrmann, Highway Safety Coordinator, Robert Pagel, Group Dynamics and Traffic Safety Coordinator for Madison Area Technical College and Richard Shold, Public Safety Coordinator for Madison Area Technical College. Richard Shold should receive special recognition for the valuable assistance he gave to this project when he was with the Governor's Office of Highway Safety at which time he was an Alcohol Safety Specialist. There were others who did much to encourage the study. Among these were Otis Mehlberg, Consultant, VTAE, and Fran Eckerman, AAA.

Such a study as this could not have been accomplished without the help and cooperation of the coordinators in the six centers that took part in the Evaluation Study. The instructors were instrumental in the conduct of this project. Without their willingness to have their classrooms observed the study could not have been conducted. The cooperation of the participants should also be noted.

Two further points need to be made here. First, the Evaluation Study was funded through the Governor's Office of Highway Safety with funds received from the National Highway Traffic Safety Administration of the United States Department of Transportation. After the Governor's Office of Highway Safety was disbanded the director of the Evaluation Study reported to the Highway Safety Coordinator, Wisconsin Department of Transportation.

This report does not contain the manuals and other materials that were part of the methodologies used in this project. These resource materials were developed at the University of Wisconsin-Madison in the Group Dynamics Laboratory. Where necessary they were modified for use in this evaluation project. Persons interested in obtaining copies of these materials should write directly to Professor Robert D. Boyd.

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CHAPTER ONE

The Nature and Scope of the Evaluation Study

Introduction

This is a report of the in-depth Evaluation Study conducted on and for the Wisconsin Group Dynamics Traffic School Program. The Evaluation Study was to examine, analyze, and report on the types and quality of classroom interactions present in GD-TSS instructional groups. Ten representative GD-TSS groups participated in the study. The criteria used for the Evaluation Study were based upon principles of good adult education and effective group dynamics practice and viewed within a personal growth framework.

This chapter is an overview of the Evaluation Study. It contains a statement of the objectives which were adopted and a presentation of the rationale which guided the design for the Evaluation Study. A discussion follows exploring certain evaluation issues that are pertinent to this type of evaluation. A description of the design for the Evaluation Study is outlined. The chapter closes with a brief description of the chapters.

Objectives

In the State of Wisconsin a driver who has been arrested on the charge that he/she has a .10 or greater percent of alcohol in his/her body may be sentenced by a judge to a mandatory 21 hours of education. This education program is officially labelled the Group Dynamics Traffic Safety School. These 17.5 hours may be arranged in class sessions of various lengths and over different numbers of weeks. The most common practice is to hold seven sessions of three hours duration over seven weeks. The groups vary from 8 to 17 members. The State Department of Transportation, which is the official overseer of the program, has prepared a published curriculum. On the basis of our observations, most teachers review the effects of alcohol on the body, show films dramatizing the effect of alcohol on family and work relations, encourage participants to discuss their drinking behavior, and request the sharing of personal plans to eliminate OWI.

The educational goals, the manner in which the classes are to be conducted, and the curriculum of the Group Dynamic Program are presented in the manual entitled Standards for Course Content and Mode of Instruction. This publication was issued in July 1978 by the Department of Transportation, State of Wisconsin, as the official statement of curriculum standards. The program criteria employed in the Evaluation Study were based on this document.

The state document clearly establishes that the Group Dynamic Traffic Safety School has been developed on the position that information alone is not sufficient to bring about changes in attitudes and behaviors of those persons who have been enrolled in the program. This position does not discount the importance of information, but that the delivery of information by itself cannot be assumed or expected to do the educative or re-educative job. The repeated message throughout the document is that information must be dealt with in a group situation where facts, ideas, feelings, and perceptions can be mulled over, reflected upon, and examined in the give-and-take interactions among all members of the group. This sharing between participants is set out as a basic format of the program and is seen as being crucial for both learning information and, using that information to make significant changes in understandings and attitudes about drinking and driving. It is, therefore, abundantly clear that any evaluation of the program must accept the stated mode of instruction as being a group dynamic program in adult education. Accordingly, the Evaluation Study examined the program as an adult education program with the primary mode of instruction being group dynamics.

It is also apparent from the Standards document that two types of changes in the participants' behaviors were to be sought for through the GD-TSS program. The participants were expected to develop certain attitudes towards drinking and driving. The change in knowledge was viewed as being a significant contributing force to attitude change. It was the position of the designers of the GD-TSS program that such changes would lead to the desired result that participants would not drink and drive. The Evaluation Study investigated the factors of attitudes and knowledge achievement.

The primary objective of the Evaluation Study was to conduct an in-depth study of ten representative groups. This involved systematic observations of classroom interactions from the start of the first session to the close of the last class, to be followed by a series of analyses on these data. Other possible corroborating data were collected. In short, the Evaluation Study investigated such factors as teacher roles, teaching styles, group development, group conflict, participants' attitudes, knowledge achievement and participants' perceptions of the program.

The major objectives of the Evaluation Study are stated here in general terms:

To examine the sessions to determine whether the instructor is making significant inputs to establish a climate where the students can express their ideas, concerns, and feelings.

To examine the instructor's inputs to determine their effects on the development of the group's psychosocial climate.

To record, classify, and analyze the psychosocial attitudes of the students from the pre to the post session to determine possible effects the GD-TSS program may have had on changing attitudes.

To analyze the psychosocial inputs of the instructor to determine what effects they had on the students' coping and defensive behaviors.

To examine the achievement scores of the participants' cognitive understanding of the effects of alcohol on driving.

To describe the verbal communication patterns in GD-TSS classes.

To examine the sessions to determine whether the groups are being conducted in accord with the generally accepted practices of group dynamics.

To examine the sesssions to determine whether generally accepted principles of sound adult education are being practiced.

RATIONALE

Determining the value of the on-going education with a here-and-now focus should be the major basis upon which to judge the merits of an educational program. There are five reasons for asserting this position:

1. If our attention is directed at learning in the here-and-now, it is

difficult to accept the idea that what is not clear now will be so at a later time. In accepting the idea that one must focus on learning in the here-and-now, one can not avoid the on-going responsibilities that instructor and students share.

2. Transfer cannot occur unless the learner understands. The focus must be the learner understanding now, for the possibility of transfer depends solely upon the learner mastering the learning, and that exists in the immediate here-and-now. To be concerned about what the learner may do in the future is premature.

3. Teaching for the future, and that is the message instructors hear when recidivism is used as an educational criterion, allows instructors to be less rigorous. It is not that instructors do not attend to the group, but that their attention is divided between what the learners are doing and what they may do in the future. The latter question is unanswerable and, therefore, the instructor's energies are wasted. Giving attention to what may happen directs attention away from the here-and-now and the instructor consequently misses some transactions that are occurring in the group.

4. The only time frame in which an instructor can make any direct input is in the time frame of here-and-now. This is not to discount that learners reflect on experiences with instructors. But unless the instructor has contributed in some meaningful way during this sharing, there can be no reflection at a later time. The instructor's significant contribution can only be laid down as he/she transacts with the learner and that is why the transactions among students and instructor should be the major focus of any educational study.

5. If there is any carry-over from an educational program (in this case, the Group Dynamics Program), the carry-over will be significantly determined by the extent to which the learnings have resulted in a generalization. Instructors can help learners to develop generalizations. Helping learners to develop generalizations is the only means available to instructors to influence future situations in which the learners find

themselves. But generalizations are developed in the here-and-now relationships that instructors share with learners. It is illogical and perhaps unjust to fault an educational program in which learners have developed generalizations and in later situations failed to apply them.

This line of thinking was the basis for proposing that systematic observations of on-going classes in the Group Dynamics program must be the major component of the evaluation study.

EVALUATION ISSUES

In the development and design of this Evaluation Study two evaluation issues kept reappearing either in the literature or from questions raised by interested persons. One issue concerned the use and value of pre-post studies. The other was the issue of recidivism. Each will be discussed in turn.

Pre-Post Evaluation Studies.

There have been studies in the re-education of OWI offenders which have used the methodology of pre-post testing. These have been employed as a means of determining cognitive achievement and attitude change. Initially, it may appear reasonable to assume that pre-post evaluation is a sound educational practice. There are, however, serious limitations to this methodology.

A student may gain information from sources other than the classroom. An instructor may provide specific instruction to help students achieve a high score on the post test. On attitude questionnaires there are other problems. The pencil and paper test on attitudes must be suspect in educational programs such as OWI re-education because there are possible rewards and punishments. Most students are able to discern what are acceptable and unacceptable attitudes and answer accordingly.

Pre-post methodology also overlooks a major purpose of the GD-TSS program. The program has as one of its central purposes providing situations in which participants discuss their relationships with alcohol. Thus, to evaluate this important aspect of the program properly, it is necessary to observe and analyze the classroom interactions.

Recidivism

Although the examination of recidivism was not within the scope of this Evaluation Study, it is frequently seen as the crucial criterion of the success or failure of similar Group Dynamics Programs. The central role of this criterion requires some explanation.

Recidivism appears to be a reasonable criterion to judge the success of the GD-TSS program. The program was instituted to reduce incidents of OWI and therefore the drop in recidivism would be a measure of the program's success. There are two basic points that must be considered before the criterion of recidivism is accepted.

In accepting the criterion of recidivism, there is an acceptance of the position that if an individual has learned he/she will use that learning in future situations. Such a position puts all the decision and control with the learner. It totally discounts the forces, pressures, and circumstances that an individual faces in the situations of everyday life. There are a wide range of forces on an individual in our society in which the use of alcohol is an accepted, even encouraged response. Alcoholics Anonymous programs have long realized the pressures of living and, thus, the need for support even though the former alcoholic has thoroughly learned the difficulties drinking causes.

If an educational program does not reduce recidivism then the question of its value certainly must be raised. There is, however, a prior question. Is the educational program being conducted as it was proposed and in the most effective manner to bring about changes in behaviors and attitudes? It is not logical to describe an educational program as either failing or succeeding to reduce recidivism in the absence of sufficient knowledge of how the program is being conducted. Until the present Evaluation Study was undertaken, there has not been an in-depth, systematic study of classroom interactions in the Group Dynamics program. Before the criterion of recidivism can be used, such an evaluation study as presented in this report must provide an answer to the question: Is the educational program being conducted as it was proposed and is it being conducted to facilitate changes in behavior and attitudes as specified in the state curriculum?

The *Evaluation Study* has not ignored the criterion of recidivism. The first task is to get an accurate and in-depth picture of how the Group Dynamics program is being conducted. The study of the program will provide evidence that will point to one of two broad alternatives. If the evidence shows that the curriculum is being followed and sound instructional practices are being used, then a study of recidivism should be made. If, on the other hand, the evidence shows that the curriculum is not being followed and/or the instructional practices could be improved then the study of recidivism should be postponed until these problems have been corrected. This *Evaluation Study* provides this needed and basic evidence.

THE DESIGN OF THE EVALUATION STUDY

The sheer size of the GD-TSS program required a selection of one of two evaluation designs. The choice was between a broad and inclusive survey of the 16 districts in Wisconsin that operated GD-TSS programs or an in-depth study of a small but representative sample. In the first approach a limited variety of easily obtainable data from a large population is gathered while the second approach gathers in-depth and detailed data on a limited but represented population. The *Evaluation Study* was designed on the format of the second approach. The decision to go with this approach was based on the serious gap in our knowledge about exactly what was taking place in class sessions of the Group Dynamics program. Survey-type studies had been reported in the literature but such studies left unanswered questions about teaching behaviors, on-going learning, and the interpersonal relations occurring in these classrooms. Answers to such questions were crucial before any statement and judgment about the effectiveness of the Group Dynamics program could be given.

Once the decision had been made to conduct an in-depth and detailed study of a limited number of representative groups, several design problems had to be resolved. Foremost among these problems was: How were the representative groups to be selected? If the study was to have any generalizability, it was necessary to establish a selection of groups which could be described as representative of the participants and instructors who compose the population in the GD-TSS program in the

State of Wisconsin. To achieve this goal it was first necessary to establish a current profile of the participants and instructors. This was done through a pilot study conducted from December, 1978 through January, 1979, which procured data on 647 participants and 79 instructors. The data were organized on such variables as age, sex, education and employment for the participants. The data on the instructors were organized on variables such as experience in GD-TSS programs, education, and teaching experience. The criterion for selecting participants was based on the distribution of a given variable (ie. age, sex) in the GD-TSS population. Thus if 22 percent of the population were between the ages of 16-20, 22 percent of each group that were composed as a representative group were made up of persons in this age range. All variables were set up as criteria for selection on this identical manner. Instructors were selected in a similar way. The district coordinators for the GD-TSS program were given the specifications for who should be selected to compose the groups. The evaluation team worked with the coordinators in the composition of the groups. There were some exceptions to the make-up of these groups. One group had no women and another group did not have a man over the age of 55 years. In general, the groups were composed of those individuals who characterize the general population in the GD-TSS program.

Six cites were selected from which to obtain ten representative groups. These cites gave a range among different population centers, types of agricultural and industrial employment, and ethnic backgrounds common in the State of Wisconsin. The larger population centers provided two groups each for the study.

As an overview of the Evaluation Study, an outline of the types of data and the manner in which these data were collected is given here. In subsequent parts of this report, fuller descriptions of the instruments and procedures are given. The Evaluation Study collected data on the participants and the instructors as well as on the on-going classroom sessions.

The evaluation team was present at the first and last meeting of each of the ten groups. The instructor for the group introduced the director of the project who in turn introduced his staff and gave a brief explanation about the study. The two and a half hours of the first meeting of the group was taken to collect information on the participants and instructor. Every participant was interviewed individually and privately by one of the five members of the team. The interviews which lasted from forty-five minutes to an hour were audiotape recorded. The instructor was interviewed by the director. All participants completed a self description questionnaire and the Mafetti Inventory during that period when they were not being interviewed. This procedure and these instruments were again employed at an additional class session following the last regular class session.

The evaluation design required that every session from beginning to end be both audio and video taped. This necessitated the selection of classrooms which were sufficiently large to give a picture of the total group. All centers were able to comply with this request. Although technical difficulties were encountered with one or the other recording systems in various centers, only a few hours were lost. At the close of each session the participants and the instructor completed a post-meeting-reaction-questionnaire. These questionnaires were collected by a class member, placed in a self-addressed, stamped envelope and mailed to Evaluation Project in Madison.

THE FRAMEWORK FOR THE EVALUATION STUDY

Whenever behavior is observed, it must be identified in some manner if it is to be discussed. This requires a system of naming based on some set of characteristics or specifications. In short, it is necessary to have a framework. A framework provides a consistent and coherent set of defined variables and a corresponding set of propositions stating the relationships among these variables. In the case of the Evaluation Study, a framework not only provides the means to describe and classify observations but also provides an operational basis for the criteria by which to evaluate the GD-TSS program.

It was critical to have a clear understanding of the basic purposes of the educational format of the GD-TSS program before an appropriate framework could be adopted for this Evaluation Study. In an earlier section of this chapter, it was stated that the State of Wisconsin's Standards for Course Content and Mode of Instruction served as the basic statement for the criteria of the Evaluation Study. Two emphases set out in that document were the basis for two evaluation criteria. First, the Group Dynamics program must be judged on the basis of whether and to what extent the classes were conducted in the generally accepted format of group dynamics. In accord with this criterion, judgments would be made on such practices as the amount and type of interpersonal interactions, the development of facilitating learning atmospheres, and the sharing of personal insights. Second, the Group Dynamics program must be judged on the basis of sound adult education instructional practices. Judgments would be made on the manner in which instructors carried out such instructional roles as programmer, helping adults to analyze difficulties and relate information.

From these two broad criteria, it was necessary to develop specific criteria that could be used to determine where the program was succeeding or failing. This demanded a framework that could be used to describe what was meant by success and what was meant by failure. A framework was required which would provide a reading on the extent to which participants were coping with difficulties and which would also provide a reading on personal development. The psychosocial framework of human development was adopted to meet these two requirements (Erikson, 1950).

The framework uses the term psychosocial because in the consideration of human behavior there are two primary components. The psychological component encompasses the unique characteristics of a person that together identifies him/her as an individual. The social component encompasses all those forces, traditions, mores, and conventions which have an impact on the individual in the active give and take of everyday living in the family, in the work-a-day world, and in the wider worlds of community and society.

The psychosocial framework identifies a set of eight developmental stages beginning with birth and ending with old age and death. These eight stages are each composed of conflicting ways of viewing life. These ways of viewing life are called basic attitudes. They are an outgrowth of the interactions between the ways the individual acts and the ways society acts towards the individual. For example, the first developmental stage involves the resolution of the conflicting attitudes

Maturity								8
Adulthood							7	
Young Adulthood						6		
Puberty and Adolescence					5			
Latency				4				
Locomotor-Genital			3					
Muscular-anal		2						
Oral-Sensory	1							

1. Trust vs Mistrust
2. Autonony vs Shame and Doubt
3. Initiative vs Guilt
4. Industry vs Inferiority
5. Ego Identity vs Diffusion
6. Intimacy vs Isolation
7. Generativity vs Stagnation
8. Ego Integrity vs Disgust and Despair

Figure 1.1 The Eight Psychosocial Stages

of Trust and Mistrust. The crisis between these two opposing views of life arises in the first stage or period of life, that is, from birth to about two years of age. The child's inability to care for his/her own needs makes it dependent on others. The child must trust that his/her needs will be cared for otherwise there is no assurance of life. The manner in which the parent meets the child's needs has a large input into how the child feels (trusts) the world.

The initial resolution of the crisis of Trust versus Mistrust becomes part of the resolution of subsequent developmental stages. Thus, this framework not only accounts for developmental crises which are unique to specific periods of the maturing individual but it integrates the past as an active and vital part of the on-going psychosocial development of the individual. A diagram presented in Erikson's work (1950) clearly illustrates these points. It is reproduced here as Figure 1.1.

Along the left hand side of the chart are the chronological ages of development. At the top are listed the eight psychosocial stages of development. Each shows a conflicting set of basic attitudes. The square at the lower left corner identifies where both the chronological period and the psychosocial crisis of Trust-Mistrust are phase specific. That is to say, when an individual is at the age covering the period between birth and about two years of age he/she faces and must develop an initial resolution to the crisis of Trust vs. Mistrust. Progressing diagonally from the lower left corner square to the upper right corner square, the eight psychosocial crisis are related to the chronological periods in life when these crisis are time specific.

There are two other developmental relationships the diagram can be used to point out. To the right of the diagonal squares that show the stage periods of development are horizontal sets of squares which identify the stages yet to be encountered as crisis. For example, when the child is dealing with the crisis of Trust-Mistrust the psychosocial basic attitudes of Autonomy-Shame and Doubt are becoming increasingly more focal as the child progresses through the stage of Trust-Mistrust. The squares to the left of the diagonal show the stages which have been encountered as crisis. For example, when the child is dealing with the crisis of Autonomy-Shame and Doubt the resolution of

Trust-Mistrust has been part of the psychosocial content of the child's life and, therefore, an active component in the resolution of Autonomy-Shame and Doubt.

The integral and developmental relationships of the eight basic attitudes is one of the principal reasons for selecting this psychosocial framework. Although Trust-Mistrust may have been first encountered in childhood, the attitudes of trusting and mistrusting continue to play a central role in the manner individuals relate and how they resolve current conflicting views of life. The 16 year old adolescent struggling to discover himself/herself is deeply affected by how trusting or mistrusting he/she is. The forty-year old person is greatly effected by his/her attitudes of Trust-Mistrust in making decisions that will significatly effect his/her life. The instructor in the GD-TSS classroom is continually confronting these basic attitudes in the interactions with the participants. For example ,an instructor raises the question: How did you feel when you were arrested? The question is raised to give the participants an opportunity to examine their feelings, perceptions, and understandings. But it also involves trusting, a sense of guilt, and exploration of values. The encouragement of establishing a firmer sense of trust, a reasonable amount of guilt and a clarification of values would be clear indications of measures of success. The program clearly has these objectives. The concern is to further personal development as a means to responsible use of alcohol. Thus, to the extent that instructors can further positive attitudes, evidence can be provided on the success of the program.

Since this framework describes both a psychosocial and a developmental perspective, it can be used not only to examine the individual but also the social milieu. That is to say, the social culture which both shapes and is shaped by individiuals can also be seen as handling the same developmental crisis as individuals. A group, as a microcosm of society, must deal with the establishment of trust, the exercise of control (autonomy), the initiation of projects, the completion of work, etc. Accordingly, this developmental, psychosocial framework has been employed to examine the participants and the instructional groups. Subsequent chapters of this report will have much more to contribute towards an explanation of this framework and how it has been used to evaluate the effectiveness of instruction and classroom interactions within The GD-TSS Program.

OUTLINE OF THE REPORT

A series of investigations were conducted to evaluate the GD-TSS program in terms of the objectives presented earlier in this chapter. These investigations are reported in Chapters Two through Eight. Brief accounts of these chapters are presented here as an introduction to the scope of this Evaluation Study.

The purpose of Chapter Two is to present the various sets of data that were used to structure the ten representative groups, determine cognitive achievement, and, lastly, to examine the attitudes the participants had towards the GD-TSS program and the basic attitudes they had towards life in general. The examination of these data gives background information on both the program and the participants. The results raise certain fundamental questions about the program in terms of the kinds of persons that it attempts to serve.

One objective of the Evaluation Study was to report on the roles the instructors took in their conduct of the program. The data on the types of roles and the frequencies of behavior in each role for all ten instructors are reported in Chapter Three. The instructor's behaviors were coded through the use of a classification system based on a role model of instructional behavior in adult education.

The Pilot Study tested the feasibility of making tape recordings of the class session. It was decided that these recordings could be used to study the communication patterns of classroom interactions. Although the groups that were recorded were not necessarily representative groups, data from such groups would provide further information on the conduct of GD-TSS groups. In addition, the analysis of these groups would provide certain data that could be used to test the representative nature of the ten groups. This data is reported in Chapter Four.

The behavior of the instructors was examined from another perspective. Research studies have found that instructor's behaviors which are supportive have a positive effect on students' learning. The Evaluation Study accordingly examined the instructors' behaviors using the psychosocial framework to identify positive and supportive behaviors. The effects on the students was determined by observing and recording the amount of coping and defensive behaviors. The results of these analyses are presented in Chapter Five.

Chapter Six again examined the instructors' behavior. In this part of the Evaluation Study, the focus was on teaching styles and their relationships to group conflict. Beginning with this part of the Evaluation Study, relationships between teaching and the effect of different instructional behavior on the group-as-a-whole were initiated.

In Chapter Seven, phase development became the sole focus of the Evaluation Study. There is a substantial literature in the field of group dynamics on phase development. Research shows that groups which progress from the initial to the final phase in group development provide environments for learning and growth to their members. In this part of the Evaluation Study, a systematic study of group development was conducted on two groups that had the greatest likelihood to demonstrate phase development.

Chapter Eight reports the results of the study on the work and emotionality levels of the groups. Every instructional group has to handle both work and emotionality. The level of emotionality at which the group is operating provides data on the involvement, commitment and cohesiveness of the group membership. The level of work and whether it is constructive (positive) or disruptive (negative) give evidence about the learning environment.

Chapter Nine concludes the report by presenting four sets of recommendations. Suggestions are made for a review of the structure and content of the curriculum. A specific program is proposed for the training of newly recruited instructors. This is followed by a program for inservice education. The third set of recommendations are brief statements on further studies which should be conducted to investigate areas beyond the scope of this Evaluation Study and to seek answers to questions raised in this report. The chapter concludes with a set of general programmatic recommendations.

CHAPTER TWO

General Information On The Participants, Instructors And The GD-TSS Program

INTRODUCTION

This chapter will present data on the participants and the instructors. Four sets of data will be presented organized around the following four questions.

> What were the demographic parameters within which the selection of the participants and instructors were made?
>
> Did the participants show an increase in their knowledge about alcohol from the beginning to the close of the program?
>
> Did the participants see the program sessions and the instructor as being of help to them?
>
> What psychosocial attitudes do the participants express in their interviews and were there any changes from the interview given prior to the program when compared to the interview immediately following the completion of the program?

Each of these questions will be examined separately and in the sequence presented above.

DEMOGRAPHIC DATA

A primary objective of the Evaluation Study was to provide the widest basis possible for the generalization of the findings. Since only ten groups were to be examined it was necessary to establish the most representative sample. Several steps were taken to insure this outcome. First, the literature indicated a set of demographic variables which appeared to be present in the delineation of populations arrested for OWI. Second, a pilot study conducted throughout the State of Wisconsin provided a broad sampling of the OWI population and the instructor population. Third, the demographic data from this sample were tabulated and frequency distributions were constructed from these data. Four, these distributions were then employed as sampling norms upon which the selection of the participants and the instructors were made.

Although the literature on OWI populations is not extensive there are indications that certain demographic variables characterize OWI populations. The following variables appear to be crucial in the identification of participants and the structuring of GD-TSS groups.

Sex
Age
Marital status
Education
Occupation

The criteria for the selection of instructors were concerned with the following set of variables.

Sex
Age
Education
Courses in safety education
Accredidation
Sections of GD-TSS taught
Teaching experience in GD-TSS program
Teaching experience - general

A pilot study was conducted throughout the State of Wisconsin over a two month period. The purpose of this study was to collect demographic data on both the participants and the instructors who were taking part in the GD-TSS program during that period of time. A demographic inventory was developed for OWI participants while a second inventory form was developed for instructors in the GD-TSS program. Data were collected on 647 participants and 80 instructors in 16 regions of the state.

The data on the OWI participants of the pilot study were tabulated by a computer program that produced a frequency distribution for each of the variable. A hierarchy of variables had to be adopted in order to select the participants for the representative groups. Age was taken as the initial variable or criterion. The distribution which fell into each age category, for instance 16-20, was expressed as a percentage compared against all age groups. These percent distributions were used as the basis upon which to determine the membership composition of the ten representative groups. Each representative group would be initially composed of 12 participants. The next task was to translate the percent distributions of the various criteria variables (age, sex, etc.) into a proportional figure for each representative group. This was accomplished in the following manner. First a constant value of .12 was determined based on the fixed number of members in the representative groups. The percent distribution was then multiplied by the constant value. For example, in the pilot study 23 percent of the OWI population was between 16 to 20 years of age. This number (23) was multiplied by the constant value of .12 giving a result of 2.76. On the basis of this computation 3 participants between the ages of 16-20 would be selected for each of the ten representative groups. In an identical manner the other age groups were determined. Following the establishment of the age groups the other criteria of selection were applied using the same method as described above. This procedure first provided a profile of a representative group and secondly served as the means for the selection of the participants to the representative groups. Table 2.1 presents

Table 2.1
Criteria for the Selection of OWI Participants for Each of the Ten Representative Groups

Participants N=12	Sex	Age	Marital Status	Education	Occupation
1	M	16-20	Single	10+	Student
2	M	16-20	Single	10+	Unskilled/Semi-Skilled
3	F	16-20	Single	10+	Skilled
4	M	21-25	Single	10+	Unskilled
5	M	21-25	Single	10+	Skilled
6	F	21-25	Single	10+	Clerical
7	M	26-30	S/D	10+	Skilled
8	M	31-35	Married	10+	Unskilled
9	M	36-40	Married	10+	Skilled
10	M	41-45	Married	10+	Semi-Skilled
11	M	46-50	Married	10+	Semi-Skilled
12	M	50-	Married	10+	Skilled

10+ means 10th grade to high school completion.

the criteria profile for the composition of the ten representative groups.

The profile for the instructors was established in the following manner. The frequency distributions for each of the eight criteria were tabulated. The goal was then to determine the mean and the spread on either side of the mean. From these results specific parameters were selected within which two thirds of the instructors would be located. Instructors who had profiles which fell within these boundaries were selected for the Evaluation Study. It was argued that such instructors represented the majority of teachers employed in the program. Coordinators at the six sites made the final section based on these criteria and then on the schedule and availability of the instructors. The selection criteria are presented in Table 2.2.

Table 2.2
Criteria for the Selection of Instructors

Sex -	Only males were selected
Age -	26-45 years of age
Education -	Post baccalaureate (No Ph.D.)
Courses in Safety Education -	3 - 8
Accredidation -	Yes
Sections of GD-TSS Taught -	8 - 30
Teaching Experience in Years in GD-TSS Program	2 - 7
Teaching Experience in Years - General	0 - 6

The six sites varied, including a large metropolitan area, middle size city, small city, suburban area, rural-industrial, and rural. The sites represented five different geographical areas with the accompanying differences in ethnic, historical and economic factors.

KNOWLEDGE ACHIEVEMENT

Although this Evaluation Study was not primarily interested in the question of how much knowledge the participants gained about alcohol, it was, nevertheless, one measure by which to evaluate the GD-TSS program. The educational assumption has been made that knowledge will make a change in behavior. This is a questionable assumption as studies (Atkinson, 1958) have shown that knowledge does not necessarily make a change in behavior. It is logical to argue, on the other hand, that without knowledge, there is no likelihood that change of behavior can result other than from authoritarian constraints or impositions.

There are methodological issues raised in asserting relationships between achievement and instruction. For example, the association cannot generally be made that the achievement of tests reflects the instruction and learning that occurred in the classroom. Too many other factors and conditions enter in to argue such a direct association. As valid as such criticism may be, any educational program must concern itself with the question of what knowledge has been gained. The GD-TSS program is no exception to this rule.

The results of the pre-post tests for the ten representative groups are presented in Table 2.3

PARTICIPANTS' APPRAISAL OF PROGRAM

How a student perceives an educational experience may provide a great deal of insight about the effect the experience is having on the student's learning. Therefore, in such an evaluation study as this it is most appropriate to raise the question: Did the participants see the program sessions and the instructor as being of help to them?

Two collection methods were used in gathering data to answer this question. One method was a post-meeting-reaction-questionnaire (PMRQ). The second method was impressions shared with the interviewer during the interview following the last session of the program.

The PMRQ was composed of 12 statements which described feelings and impressions members have about group instruction and also types of behaviors that may occur in groups. An example of feelings or impression was:

I feel manipulated.

Table 2.3

Pre and Post Test Scores
on the Malfetti Inventory
for the Ten Representative Groups

GROUPS	Pre Test X̄	Pre Test SD	Post Test X̄	Post Test SD	Pre/Post Diff
1	10.7	4.9	16.0	2.7	5.3
2	9.8	3.2	13.1	2.0	3.3
3	11.9	2.7	12.6	2.9	1.0
4	11.3	4.0	12.2	4.4	.9
5	11.8	4.6	14.7	3.4	2.9
6	10.8	4.4	11.9	4.8	1.1
7	11.0	4.5	12.6	3.8	1.6
8	11.6	5.0	13.7	2.1	2.1
9	11.3	4.4	12.6	5.1	1.3
10	9.4	5.4	13.1	5.2	3.7
MEAN	10.9	4.3	13.2	3.9	2.4

An example of a description of behavior was:

> I stayed silent today when conflict arose between members.

The participants were asked to respond on a scale from 1 (least) to 7 (most) on each of the 12 items. The PMRQ was administered at the close of sessions 1, 3, 5 and 7. The questionnaire was completed independently and privately by each participant and then collected and placed in an envelope by a participant. The envelope was sealed and mailed to the Evaluation Project in Madison. No instructor saw the responses on the participants' questionnaires. The results on the PMRQ for the ten groups are present in Table 2.4.

In general the results can be characterized as positive. The members felt they could share information, discuss personal matters in the group, be honest and straightforward. Although the participants initially felt manipulated they changed their impressions as the sessions progressed. The members also saw the groups as a place to share real feelings of warmth and to state ideas. They also perceived that they were treated as adults by the instructors. The relatively small standard deviations show fairly commonly shared impressions among the members. It would appear reasonable to conclude in the light of these findings that the participants saw the program sessions and the instruction as positive and helpful.

There was some concern that the pencil-paper PMRQ may have had some biases which could not be readily identified. For example, since the PMRQ had the appearance of an instructor evaluation form the participants in the role of students may have responded more favorably towards the instructor and the program than in fact they may have felt. As a further check on the perceptions, feelings and thoughts the participants may have had towards the instructor and the program, the post interview was used to gather corroborative data.

In the post session interview, that is, the interview which directly followed the last session, the participants were individually and privately interviewed by one member of the Evaluation staff. These interviews were conducted in four separate rooms. The staff member brought one participant at a time to be interviewed and the interviews lasted from forty-five minutes to somewhat over an hour. They were tape

Table 2.4

Means and Standard Deviations on Post Meeting Reaction Questionnaire For the Ten Representative Groups

	SESSION 1		SESSION 3		SESSION 5		SESSION 7	
ITEMS	X̄	SD	X̄	SD	X̄	SD	X̄	SD
I am willing to share information.	5.5	1.4	5.9	1.1	6.1	1.0	6.3	.7
I feel the instructor can be trusted to keep personal information confidential.	6.3	1.0	6.3	1.0	6.5	.9	6.5	.9
I am treated as an adult in this group.	6.6	.8	6.4	.9	6.5	.9	6.9	.7
I can be honest and straightforward in this group.	6.3	1.0	6.3	.9	6.4	.9	6.4	.8
I feel free to discuss personal matters in this group.	5.1	1.4	5.4	1.3	5.4	1.3	5.8	1.0
I feel manipulated.	5.1	1.6	3.0	1.8	2.7	1.7	2.8	1.6
I think twice before I speak in this group.	4.7	1.8	4.7	1.7	4.6	1.9	5.0	1.8
In this group I state my ideas even if the majority of the group opposes them.	5.2	1.6	5.3	1.5	5.3	1.6	5.7	1.1
We shared a real feeling of warmth in the group today.	5.2	1.5	5.7	1.3	5.6	1.2	6.1	.7
I felt confused about what my function was in this group today.	5.7	1.6	5.7	1.6	5.9	1.4	5.7	1.7
We acted more like independent individuals than a group today.	4.2	2.0	3.9	2.0	3.9	2.1	4.2	2.2
I stayed silent today when conflict arose between members.	3.5	2.0	3.5	1.9	3.4	1.8	3.4	1.6
Number of Groups	10		10		10		5	
Scale	1 - 7		1 - 7		1 - 7		1 - 7	

recorded. Although there was an interview schedule with a specific set of questions the participants were encouraged to talk freely. In this manner the interview was structured to gain any input the participants wished to make. More will be said about these interviews in the next section of this chapter.

The taped interviews were carefully examined during the analysis phase of the Evaluation Study to determine the perceptions the participants had about the instructor and the program. In addition the analysis identified any indications the instruction and the program may have had on the participants which the participants may not have been explicitly aware of yet could be clearly identified in the interview. It should be re-emphasized at this point that the Evaluation Study was not concerned with the specific instructors or the specific program but took them as representative of the program in general.

The coders who analyzed the tape recordings of the interviews were required to record on a special form the answers to specific questions that the interview data provided. The tabulation of these data is presented in Table 2.5.

The results of these analyses is less favorable than the fndings on the PMRQ. The participants reported that the program did correct a few misperceptions. Based on the participants' inputs in the interviews the program had little or no effect on their psychosocial attitudes. The participants worked only to a limited extent on their psychosocial attitudes and they indicated only a superficial sharing of personal problems related to drinking. These findings are less supportive of the program than the results reported on the PMRQ. In a comparison of the data from the PMRQ and the taped interviews the Evaluation team places more weight on the interview data. It is much more difficult to mask or fake in a lengthy interview which allows for follow-up and probing questions than on a pencil and paper instrument.

The conflict between the two sets of data does highlight a possible relationship between participants and instructors which should not be overlooked. For the participants to report a clearly positive reaction on the PMRQ may indicate some level of empathy with the instructor and/or the program. Were this not the case the participants would have reported a negative response as they appeared to do in the interview. The less favorable reporting by the participants in the interviews may have been the opportunity the interview gave the participants to elaborate on their concerns. In doing so they may have been revealing a host of issues, shortcomings, criticisms and disappointments in the program. Other parts of the Evaluation Study have identified aspects of the program and the instruction which need to be changed or modified if these concerns are to be constructively resolved.

Table 2.5

Means and Standard Deviations on Items 1, 2, 3 and 5
of Post Interview Assessment Form Over All
Ten Representative Groups

Did the participant see the experience of GD-TSS as changing his/her perception about drinking-driving?

No effect	Slight	Corrected a few misperceptions	Corrected many misperceptions	Made significant changes
(1)	(2)	(3)	(4)	(5)

$\bar{X}$ = 3.5 SD = 1.2

Did the participants see the GD-TSS experience affecting his/her psychosocial projects?

Negatively		Neither			Positively	
Greatly	Noticeably	Slight /	0	/Slight	Noticeably	Greatly
(1)	(2)	(3)	(4)	(5)	(6)	(7)

$\bar{X}$ = 48 SD = 1.4

Did the participant give any indication he/she worked on psychosocial projects in the GD-TSS sessions?

No indication	Some indication	Clear indication	Much indication
(1)	(2)	(3)	(4)

$\bar{X}$ = 2.1 SD = 1.0

Did the participant see the GD-TSS sessions as a place to share problems which may have been related to his/her drinking?

No	Superficially	Occasionally	Yes
(1)	(2)	(3)	(4)

$\bar{X}$ = 2.4 SD = 1.1

In order to determine the effect of certain factors on the participants as revealed through their interviews three types of data were interrelated. The findings are reported in Tables 2.6 and 2.7.

In examining the first cluster of factors in Table 2.6 it is critical that the number of times the factor was mentioned be considered in reading the results. For example, the factor accident had a value of 3.4 which was the highest value for any factor, yet only 12 participants

Table 2.6

Mean Values of Factors Reported by the Participants as Having an Effect Upon Them Based on Post Session Interviews

What had the greatest effect?

None	Slight	Fair Amount	Great Deal	No Indication
1	2	3	4	0

Set One	Mean Value	S.D.	N
1. Accident	3.4	.9	12
2. The arrest	3.3	.7	68
3. The imprisonment	3.3	.6	3
4. The court/trial	2.7	1.6	3
5. Family reaction	2.8	.7	13
6. Friends	2.7	1.0	12
7. Consequences for job	2.6	1.7	11
8. Group dynamic class	3.0	.8	105
Set Two			
1. Instructor	3.0	.7	102
2. Films	2.8	.8	76
3. Invited guests	3.0	1.4	2
4. Curricular materials	2.5	.6	60
5. Other class members	2.7	.8	101
6. Participant's own contributions	2.3	.8	91
7. The group	2.9	.8	103
8. Curriculum content	2.6	.7	95

mentioned this factor. The arrest and the group dynamics class were identified as factors having effects by 68 and 105 participants respectively. They had values of 3.3 and 3.0, thus both factors were identified as having a fair amount of effect on those participants. Imprisonment had a high value, 3.3 but only 3 participants reported on this factor. This result was a function undoubtedly of the limited number of persons who were imprisoned. In respect to the other four factors (4 through 7) the standard deviations were wide for the effects of the trial (4), friends (6), and consequences for job (7). Again the number of participants who mentioned these varied a good deal as to the effect these factors had on their lives.

In viewing the effects of the factors listed in Set Two the instructor had the greatest impact on the participants. Invited guests can be eliminated as a factor because of the low number of responses. Films, other class members and the group were only slightly below the

Table 2.7

Mean Values of Factors Reported by the Participants as Having a Positive Effect on Their Lives Based on Post Session Interviews

Did the GD-TSS Sessions have any positive effect on other parts of the participant's life?

None or no indication	Possible effect	Some effect	Significant effect
1	2	3	4

	Mean Value	S.D.	N
1. Family	1.6	.9	105
2. Job	1.3	.7	105
3. Friends	1.4	.7	105
4. Drinking	2.4	1.0	105
5. Drinking-driving	3.2	.9	105
6. Society relationships	1.4	.8	105

instructor as a factor that affected the participants. It is of some interest to note that the least effect was attributed to the participant's own contributions. At this stage of the analysis it is only possible to conjecture the reasons for this finding. This finding may be a reflection on the limited amount of input many members made during the class sessions. It may also reflect the low opinion these persons have of their contributions and perhaps even of themselves as persons. This point will be explored further in the section of this chapter that reports on the psychosocial attitudes of the participants.

Table 2.7 presents another set of findings based on data gathered during the post interviews with the participants. In one manner or another 105 participants reported on all six factors. The most striking finding was the participants' reporting that the GD-TSS program did have a positive effect on their drinking-driving, (mean value was 3.2). Except for a possible or a limited effect on the participants' drinking (mean value was 2.4). The GD-TSS program had very little or no effect on other parts of the participants' life.

Among the several insights that can be gained from these findings are two which are central to the thrust of this Evaluation Study. The first has to do with the instructor and the instruction and the second with the effects of the GD-TSS program on what would be considered as being generally significant aspects of the participants' life.

Three sets of data appear to provide what would appear to be different reactions the participants have towards the instructor and instruction. The PMRQ data (Table 2.4) clearly indicate the participants have a favorable impression of the instruction and of the instructor. When the interviewers explored the effects the GD-TSS program had on changing the participants' perceptions about drinking-driving only a moderate response was found (Table 2.5), that is the GD-TSS program was viewed as correcting only a few misperceptions. Yet during the same interviews the participants clearly indicated that the instructor had a fair amount of effect or influence on them. It appears from these findings that the GD-TSS program is not viewed as having much influence but that the instructors do. In other words the participants appeared to have separated the instructors and the GD-TSS program. T observations of the Evaluation team would support this interpretation. The instructors were committed, involved and dedicated men. They believed in the work that they were doing and this appeared to be communicated to the participants. This is evident in the findings of the PMRQ. The instruction and the GD-TSS program were not as highly rated as the instructors. The reason for this difference is examined in the chapters which follow. Certainly the central role given to the instructor is in large part a function of his type of input as well as the large percentage of the interaction contributed by the instructors. These points will be fully examined in subsequent chapters.

The other insight gained from an inspection of the data presented in Tables 2.6 and 2.7 is the limited effect of the GD-TSS program on the other aspects of the participants' lives. Drinking and driving is not an isolated individual phenomenon. This is much more the case when it ends in an OWI arrest. Family, friends, job relationships and community are all involved in one manner or another when an OWI arrest occurs. Yet the data in Tables 2.6 and 2.7 reveal limited involvement of these aspects of the participants' lives. We must certainly ask the question: Why were they not seen as being effected? One explanation may be that they were involved but the GD-TSS program did not touch these relationships and therefore had little or no effect. Another explanation may be that the participants succeeded in isolating their involvement in the GD-TSS program from those other aspects of their lives. Although it is difficult to believe, these participants may have limited involvement with family, friends and the community. That is, the participants as a group may be to a large extent isolates or loners. Further insight to this explanation will be obtained when the psychosocial attitude data are examined in the next section of this chapter.

Whatever explanation or set of explanations may be found to explain these results the educational implication must be squarely faced. Any educational program designed to help individuals arrested for OWI must have positive effects for those individuals in their relationships with family, friends, job and community. It has long been recognized that excessive drinking whether classified as social or alcoholic is social in its origin, manifestations and its results. Therefore any successfu educational program must be seen as having a positive effect in the various and significant aspects of an individual's life. An educational program that fails to show this effect must be seen as failing to influence the individual and therefore failing to help him/her to constructively handle alcohol.

PSYCHOSOCIAL ATTITUDES OF PARTICIPANTS

The fourth question raised in the initial part of this chapter focused our inquiry on the basic or psychosocial attitudes the participants express. The interviews were used as the means to get this data. The pre and post interviews not only provided more spoken input by many participants than was given by them throughout the entire program but it also provided a reading on their attitudes before the sessions began and another at the end of the program. Therefore it was possible to ask and answer the question: What psychosocial attitudes do the participants express in their interviews and were there any changes from the pre to the post interview?

One major goal of the GD-TSS program is to change those attitudes which may be a primary contributor to OWI behavior. There is substantial evidence in the study of human behavior to warrant the weight that has been placed on attitudes as a major contributing factor to OWI behavior. Since the change of attitudes is a basic objective of the GD-TSS program the Evaluation Study took as one part of its investigation a study of basic attitudes. There were two goals in the investigation of attitudes. First, what attitudes did the participants demonstrate and were there specific patterns. That is: Could the OWI population be identified as having unique sets of attitudes? The second goal was to compare the attitudes the participants expressed before the program began with the attitudes they expressed following the end of the program.

The study of attitudes is a broad area of inquiry. A wide variety of behaviors are included under the topic of attitudes. They range from deep psychological phenomenon as anxiety and paranoia to more transient concerns such as feelings towards a political candidate and the liking of a particular novel. It is apparent that the nature of the study largely determines the level and type of attitudes which are appropri to investigate.

The nature of the GD-TSS program called for a category system that would include both a psychological and social dimension of attitudes. The behavior of an individual charged with an OWI must be viewed in both the context of psychological and social factors. In addition any category system that was to be employed had to meet two other conditions. The system would have to be applicable to different age groups as the individuals who compose the GD-TSS groups range from 16 years of age to individuals in their seventies. The system of attitudes would also have to be inclusive in order to encompass the possible wide range of attitudes. Finally, the categories in the system had to be discrete in order to differentiate among the possible attitudes. In brief, the cateogry system of attitudes had to be primary, psychosocial, developmental and scientific.

Chapter One outlined a framework described by Erikson (1950) that met the requirement identified above. There are sixteen critical attitudes that compose the framework. These attitudes are set out as opposing basic attitudes. For example, the first set is Trust versus Mistrust. The individual is not assumed to have one as over against the other but a ratio existing of both. For a positive outlook on life, Trust would be the greater proportion of the ratio. The first stage of life in terms of the resolution of psychosocial relationships focuses on arriving at parameters within which the basic attitudes of Trust and Mistrust will operate. Since the framework was described in the first chapter, the reader may wish to refer to it at this point. In the material which follows the category system of attitudes investigated in this Evaluation Study will be referred to as psychosocial attitudes or basic attitudes.

The methodology for collecting data on the participants' psychosocial attitudes has four major parts. The first task was the development of an interview schedule. This was followed naturally by the training of interviewers. The third step was the administration of the interview to all participants. Finally the taped interview was coded by specially trained coders. Each of these tasks involved many hours which were employed in developing materials, testing, revisions, training and resolving methodological problems as they arose. To include a detailed description of each of these four major tasks is beyond the scope of the present report. A brief description of each major task is included in order to provide a general orientation to the methodologies which were employed.

Interview Development

The interview had to provide the interviewee the stimulus to speak to each of the eight sets of psychosocial or basic attitudes. It also had to be so structured to give the participant freedom to expand on those basic attitudes which were most central to him/her. Yet the interviewer had to have the opportunity to probe when a statement was not clear. This all had to be done in a manner that was uniform for all administrations.

The first rough interview schedule was used on team members. Following this there were three subsequent administrations to test populations and three revisions. A final interview schedule was developed and this was committed to memory by each member of the team.

Training Interviewers

During the development of the interview schedule the interviewers were also being trained. Video and audio tape recordings were made on each interviewer. The tape recording was replayed at training sessions and criticisms were made. This practice continued until all major problems were removed.

The interviewers had to be sensitive and aware of the clarity of the participants' answers to the interview questions. It was necessary that the interviewer be assured in listening to the answer that he/she could identify a sufficient level of specificity. Answers which were vague in terms of psychosocial content would not be codeable. Therefore, it was the interviewer's task to probe in order to gain a sufficient level of specificity so that the participants' statements could be coded. Because of this requirement the interviewers had to gain a sufficient knowledge of the psychosocial framework (Erikson, 1950) to satisfy themselves that the answer given by the participants was codeable. A program of training was given the interviewers which gave them the ability to identify during an on-going interview the psychosocial content of statements.

Administration of Interview

It was crucial that the most favorable rapport was achieved between the participants and the Evaluation team. The director of the project after being introduced to the GD-TSS group by the instructor of the group took a few minutes to make clear the nature of the Study. The director gave a brief background on the implementation of the project. He emphasized that this was not an evaluation of them or of their instructor but that their class was a representative group. He pointed out the confidential nature of the study and sought their cooperation and help. He introduced the Evaluation team and gave an explanation of how the evening was organized and the reasons for the type of data which were to be collected. Following this introduction one group member was paired with one of the four team members. Each pair went to a private interview room. The instructor was interviewed by the director. The other eight members of the class remained in the classroom and completed two pencil and paper instruments.

After the first four members of the class had been interviewed, four other members went with the Evaluation team to be interviewed. When they completed their interviews the last four members were interviewed. Although the interview was designed to last approximately forty-five minutes no participant's interview was terminated until the participant indicated he/she had nothing more to add.

Training Coders

The program for training coders to correctly identify and categorize verbal statements required some thirty hours of instruction. Coders first carefully read two works by Erikson (1950, 1968). Following this they were required to write from memory basic sets of specifications from Erikson's statement of the eight psychosocial stages. The coders were then given the task of sorting 160 statements into the psychosocial stages. When they successfully completed this task they were given written interview protocols to code. The coders were required to achieve a level of 90 percent accuracy. In most cases total accuracy is obtained. The final task in the training program was to code from a tape recorded interview. A level of 75 percent accuracy is required before a coder passes this final phase of the training program. After the coders had reached this level of competency they were instructed to follow the steps in coding which are described in the next section.

Coding Procedures

The coder first listened to about ten minutes of the interview to familiarize him/herself with the voices. The coder began the tape over again. As the interview progressed the coder wrote down all indications of codeable materials. Such notations included words, phrases or segments of statements and in some cases entire statements. Each of these were recorded on a separate line thereby indentifying a separate input. At the end of the interview the coder went back and coded each recorded datum. The coder replayed the tape whenever necessary to determine an accurate recording. The coder, basing his judgments on these analyses indicated on a grid the participant's psychosocial attitudes in terms of the individual's sense of being content with his/her state of attitude and whether he/she wanted to work at changing it. This step provided a further insight into the participant's psychosocial attitudes. Following this analysis the coder then ranked the participant's psychosocial attitudes in terms of their immediate significance to him/her. The last task for the coder was to write an extended paragraph on the participant's psychosocial attitudes based on the interview data. This was a concise account that was documented from the interview.

This set of procedures were followed for both the pre and post interviews.

Reliability

There were four coders employed to code the interviews. A reliability study was made at the time the coders started their coding. The Holsti test was used to determine the reliability among the coders. In the first reliability test there was a 84.7 percent agreement among the coders. In two subsequent examinations of reliability among the four coders the findings showed a 68 percent agreement and a 71 percent agreement.

The Findings

Before the presentation and discussion of the data on the psychosocial codings of the interviews is made it is critical to have an understanding of the specific nature of these data. Preceding sections have described the 1) psychosocial framework which serves as the conceptual base of the data, the 2) interview schedule and the administration which was the means for procuring the data and the 3) coding procedures which translated the interview material into psychosocial categories. The focus at this point is to make explicit the unique nature of the coded material.

A participant in describing his/her relationship to the group, for example, may have said he/she saw it as a very friendly group. The interviewer realizing that such a description was not sufficiently explicit to be coded would have asked for further clarification. Although such a description as "a very friendly group" would appear to be clear in its meaning, this is not the case when coding the statement into the psychosocial framework. A friendly group may be one that can be trusted (Trust vs. Mistrust). A friendly group may be one that shows warmth and affection (Intimacy vs. Isolation). A friendly group may be one that shows caring and concern for personal growth (Generativity vs. Stagnation). Until the meaning is made explicit the statement can not be coded to a specific psychosocial attitude.

Seeking clarification of a statement which in an everyday conversation would have passed as meaningful illustrates one primary characteristic of the framework and the coding system. The coding of the statement is not made at the surface level of the comment. In the above example the participant's comment was not coded as a description of the group as a friendly group. The comment was pursued to determine what was the psychosocial attitude back of the comment. As the participant discussed it further he/she revealed those characteristics which could be used to identify the psychosocial attitude underlying the comment. Since it is reasonably safe to assume the participant was not aware of the framework that was being employed he/she could not knowingly control the direction of the psychosocial data and thus would not intentionally bias the data. Faking and misrepresentation can occur only when the individual knows what is being solicited.

Although the participants may not have had any knowledge of the psychosocial framework, it might be argued that they may have stated certain positive qualities that they know are generally accepted as positive in our culture. For example, it was a friendly group. Granting the insincerity of the comment two methodological observations can be made. First, subsequent questions by the interviewer will reveal the shallowness of the comment, the lack of specific documentation and specific meaning the comment had for the participant. Secondly, if the participant is able to cleverly fabricate documentation he/she will reveal his/her own orientation to group friendliness quite apart from the group itself. There are two pieces of information to be gained from this. The inability of the participant to document the friendly qualities of the group and thereby he/she would fail to establish the group as a friendly group. But it may reveal the importance this participant places on what friendly means to him/her. This latter data can be directly coded into the individual's profile of psychosocial attitudes.

There is a further understanding that needs to be made clear about psychosocial attitudes and the coding of these attitudes from the two sets of interviews conducted in this Evaluation Study. Psychosocial attitudes, because they are basic components of personality, are not expected to change radically over short periods of time. Changes over short periods of time may occur but such changes are the results of traumatic experiences, educational experiences that deeply engage basic aspects of personaity, intensive psychotherapy and exhilarating religious experiences. Movement in psychosocial attitudes can occur at those times when an individual is ready and prepared to consider a change in his/her basic attitudes. An educational program can further personal growth of positive psychosocial attitudes when it is designed to help in developing such readiness and then to aid in guiding and supporting individuals in their development of positive psychosocial attitudes. For example, an educational program illustrates these qualities when it helps individuals to move from a general personal orientation of dependency, yet manifesting resentment towards authority, to an orientation of autonomy, a belief in him/herself to make and carry out decisions. The GD-TSS program has the potential to provide such educational opportunities because some participants are at critical crossroads in their lives as is often evidenced by their OWI arrest which can be viewed as a symptom of the critical crossroads.

The State Curriculum Statement for the GD-TSS program makes it clear that one major thrust of the program is to deal with the changing of attitudes towards alcohol and drinking-driving. A change in attitudes towards alcohol and drinking-driving may not be synonymous with a change in basic psychosocial attitudes. Nevertheless, it is highly unlikely that as a participant works through his feelings, perceptions and attitudes towards and his experiences with alcohol that he/she would not also have to deal with his/her basic psychosocial attitudes. The individual is a whole and what affects one psychosocial aspect must affect other related parts of the individual's life. Thus, an effective GD-TSS program must take into account psychosocial attitudes. In point of fact, this is clearly recognized in the GD-TSS program as illustrated by the stress that is put on developing trust and individual responsibility for one's own behavior. This focus identifies two of the basic psychosocial attitudes.

The change the GD-TSS program can facilitate in the participants' psychosocial attitudes is one in direction and degree. Each of the eight sets of psychosocial attitudes has a positive and a negative orientation. For example, Trust is positive and Mistrust is a negative orientation. In this manner the basic attitudes can be described as having direction. No one individual can be characterized as totally trusting. There is for each set of basic attitudes a ratio where one member of the pair is greater than the other. Thus, we describe a person as being very trusting which indicates that Trust is a greater part of the ratio than is Mistrust. An educational program that has the aim of bringing about changes in psychosocial attitudes attempts to achieve this aim by changing the ratio from negative to positive. It achieves this by strengthening the positive aspect of the pair. For example, an educational program would try to strengthen Autonomy and minimize Shame and Doubt. It is this reconstruction of the ratios that would be expected from an effective GD-TSS program. With a more positive than negative resolution to basic attitudes the individual may be expected to approach life more constructively, responsibly and intelligently.

The above introduction to this part of the Evaluation Study was viewed as being crucial to an understanding of the type of data and the findings which are reported below. As was pointed out earlier in this report the psychosocial framework has not been employed in educational evaluation studies previously and as a framework it is more complex and therefore requires a more thorough understanding than is ordinarily required.

The data for this part of the Evaluation Study were obtained through extensive and indepth interviews. The interviews were taped and then analyzed using a methodology which coded the participants' statements into a category system of basic psychosocial attitudes (Boyd, 1961). The findings are reported in Tabes 2.8, 2.9 and 2.10.

Table 2.8

Percentages of Positive and Negative
Psychosocial Attitudes Coded in
Pre and Post Interviews
Over the Ten Representative Groups
for All Participants

Psychosocial Attitudes	Pre Interview Positive	Pre Interview Negative	Post Interview Positive	Post Interview Negative
Trust vs Mistrust	25	75	31	69
Autonomy vs Shame/Doubt	33	67	33	67
Initiative vs Guilt	37	63	33	67
Industry vs Inferiority	86	14	72	28
Role Identity vs Role Diffusion	65	35	53	47
Intimacy vs Isolation	47	53	55	45
Generativity vs Stagnation	68	33	71	29
Ego Integrity vs Dispair/Disgust	43	57	67	33

Table 2.8 presents the percentages for the positive and negative psychosocial attitudes for both the pre and post session interviews. These percentages are based on raw frequencies or the number of participants who were classified as exhibiting the basic attitude as determined from the analysis and coding of the participant interviews.

In the pre session interviews 5 of the 8 sets of basic attitudes are considerably more negative than positive. Mistrust, Shame/Doubt and Guilt are markedly greater than their counterparts. In the post interviews there is a small shift towards the positive for Trust vs. Mistrust but a negative shift for Initiative vs. Guilt. No change was found for Autonomy vs. Shame/Doubt. Most instructors worked at developing feelings of trust which may account for the shift towards the positive ratio for Trust vs. Mistrust. It was obvious that some films demonstrated the irresponsibility of drunk drivers and as a consequence

Table 2.9

Tally of the Salient Positive and Negative
Psychosocial Attitudes Based on the
Analyses of the Pre and Post Interviews
for the Total Population of Participants

Psychosocial Attitudes	Pre Interview			Post Interview		
	Positive	Negative	Total	Positive	Negative	Total
Trust vs Mistrust	14	43	57	17	38	55
Autonomy vs Shame/Doubt	28	57	85	28	58	86
Initiative vs Guilt	22	37	59	17	35	52
Industry vs Inferiority	55	9	64	44	17	61
Role Identity vs Role Diffusion	45	24	69	45	40	85
Intimacy vs Isolation	28	31	59	35	29	64
Generativity vs Stagnation	27	13	40	32	13	45
Ego Integrity vs Dispair/Disgust	3	4	7	2	1	3

such films may have contributed to the expression of more Guilt on the part of the participants in their post session interviews. In addition some instructors stated that they wanted their participants to be aware of the consequences of their behavior and this may have contributed also to the greater expression of Guilt.

This population of OWI participants expressed very positive attitudes towards themselves as good workers (86% compared to 14%: 72% compared to 28%). There is no ready explanation which would account for the drop from the pre to the post interview. Possible explanations may be suggested. This was the first time some participants had been "back to school" in a number of years and the experience may not have contributed positively to their identity as capable learners. In later chapters the report will document that some instructors did not always follow principles of sound adult education practice and effective group dynamics procedures. These conditions may have contributed to the negative shift of the participants' view of themselves as workers. Role identity also had a similar decline from the pre to the post session interview. The explanation suggested for the decline of Industry vs. Inferiority may also apply to how the participants viewed themselves. That is, more participants began to view their identity more negatively at the close of the sessions than was the case before they took part in the program.

Generativity, that is the basic attitude of caring for others, taking care of and supporting a constructive view towards life became more positive from the first to the last session as measured by these results. A positive change was even more dramatic for Ego Integrity. The number of persons involved here, however, is small and therefore the results can not be considered as having significant meaning.

Table 2.9 presents the actual number of participants who were able to be classified as exhibiting specific basic attitudes. Autonomy vs. Shame/Doubt was the most frequent critical set of psychosocial attitudes in both the pre and post interviews. There was virtually no change from the pre to the post interview on this set of basic attitudes. The attitudes of Role Identity vs. Role Diffusion had a marked increase from the pre to the post interview and all of the change was due to an increase in the negative attitude. In terms of the attributes or specifications of this basic attitude, the results would indicate that some of the participants became more confused about their roles, systems of values and where they were in the sequence of their lives.

The high frequency for Autonomy vs. Shame/Doubt indicates a good deal of involvement with authority, dependency, decision-making and control. Apparently this population has a high concern for these issues and the GD-TSS program appears to do little to change, modify or alleviate these concerns. The Evaluation team noted direct confrontations which occurred during the session which were video taped. It was also noted that the participants on some occasions would comply with the instructor's requirement but the resistance was evident if only at a passive level. Lack of involvement is a clear indication of passive resistance to authority. Subsequent chapters will present further evidence on this behavior.

There are two striking findings which are obvious from Table 2.8 and 2.9. First this population of participants have few positive attitudes. They are decidedly negative in their outlook. The question can be raised: Are they negative at this point in their lives because at the moment things are going poorly for them? That is, they are being forced to take a class which, if they had their way, they would not attend. There is another question that can be raised: Are these people generally negative? It would be difficult to classify the participants in the general class as being "losers" but this question should be raised. The study conducted by Boyd (1961) on a population of adults attending adult education programs showed a population of adults who had a much more positive outlook than shown by this OWI population. Although a much more thorough investigation of the comparisons between OWI populations and other adult groups must be made before any conclusion can be offered the results do pose basic questions and lines of research that should be pursued. It may not be too extreme to raise the possibility that perhaps there is in our culture a more negative orientation than a positive orientation. President Carter has suggested that this may be the case. Such speculations go far beyond the data and the scope of this Evaluation Study, but the answer to this question speaks directly to the administration of the GD-TSS program.

Table 2.10 examines the data from another perspective. The basic attitudes for each of the participants were ranked from 1 to 8 based on the importance attributed to the attitude during the interviews. Since the numbers were very small for ranks 6 through 8 they were dropped from

Table 2.10

Rankings of Total Number of Psychosocial
Attitudes Coded in Pre and Post
Interviews for the Total
Population of Participants

Psychosocial Attitudes- Pre/Post		Rankings					Rank Totals
		1	2	3	4	5	
1	Pre	0	8	8	10	5	31
	Post	1	9	18	14	7	49
2	Pre	0	21	33	18	4	76
	Post	1	28	26	19	2	76
3	Pre	0	8	18	18	3	47
	Post	0	2	21	19	6	48
4	Pre	0	30	25	13	5	73
	Post	1	17	16	10	6	50
5	Pre	36	13	9	5	2	65
	Post	30	19	11	4	6	70
6	Pre	37	18	13	3	1	72
	Post	38	23	6	4	4	75
7	Pre	34	11	1	0	0	46
	Post	37	9	0	1	0	47
8	Pre	4	2	0	0	0	6
	Post	1	2	0	0	0	3

the table. The table should be read in the following manner. No participant attributed sufficient degree of importance to Trust vs. Mistrust in the pre interview to give it a rank of one among the psychosocial attitudes the participant expressed. In the post interview there was one case where one participant indicated that Trust vs. Mistrust was of primary importance and accordingly was given a rank of one. The sequence of eight numbers down the left side of the table stand for the 8 sets of psychosocial attitudes.

The set of psychosocial attitudes 5, 6 and 7 were ranked as primary for almost all participants on both the pre and post interview. This result would have been expected in view of the ages of the participants. As was discussed earlier ther is a developmental dimension to psychosocial attitudes. Young adults would be expected to be concerned with Role Identity and problems of Role Diffusion. Persons in early adulthood and through the early thirties are working on resolving their concerns about Intimacy and Isolation. The concerns of Generativity and Stagnation are characteristically encountered by persons in their middle years (35 to 50 years of age). This population of participants is typical of the general population. What may not be typical is their expression of the negative aspects of these psychosocial attitudes as was reported in tables 2.8 and 2.9.

The finding that this representative population of participants had a proportionately higher number of negative psychosocial attitudes is important both to how the instructors view the participants and to how the instruction is provided. It is generally believed among instructors that the participants have negative attitudes primarily because they are forced to attend the GD-TSS program in order to keep their licenses valid. The findings clearly suggest that the participants as a group do have proportionately more negative psychosocial attitudes. It is argued here that this finding is not attributable to the fact that the interviews were given at a time in the participants' lives when they felt negatively. The interview, as has been explained in an earlier section of this chapter, explored many topics and perceptions of other aspects of the participants' lives beyond the immediate situation. If we can grant that this argument is valid then the instructors are encountering groups of individuals among whom there is a sizeable amount of negative psychosocial attitudes. To treat these negative attitudes as a result only of the mandatory nature of the educational program is a failure in seeing the depth of the negativeness. To assume that the negativeness is the result of the program being mandated may lead to proposing superficial methods to remove the negativeness. Realizing on the other hand that the negativeness may be deep-seated would then suggest educational methods that would provide opportunities to examine and develop alternative points of view and positive behavior patterns.

Many further analyses of the data on the participants' psychosocial attitudes could be made. To pursue such analyses would be to take our work beyond the scope of this Evaluation Study. The task here was to provide a profile of the participants' psychosocial attitudes, to determine whether changes occurred over the GD-TSS programs and to relate these findings to an evaluation view of the programs. These have been done and recommendations derived from these analyses are set out in the final chapter of this report.

CHAPTER THREE

ANALYSIS OF TEACHER ROLES IN THE GD-TSS GROUPS

This chapter relates to the roles played by the teacher in the GD-TSS program and seeks to determine if the teacher is following good adult education practice in the conduct of the classes. The chapter will describe the activities of the GD-TSS teacher according to the model of teacher roles developed by Boyd (1969). More specific and subtle analyses of the transactions within the GD-TSS groups are presented in other chapters of this Report.

INTRODUCTION AND BACKGROUND

Good adult education practice is defined as the positive aspects of the four primary roles that the adult educator plays: Programmer, Guide, Resource, and Facilitator. The importance of these roles lies in their performance by the teacher during the instructional period. The teacher as group leader establishes the content and direction of the learning situation. In following these roles, the teacher advances or retards the learning experience. The teacher's input, within the structure of these four roles, determines to a large degree the transactions that can take place in the learning group.

The importance of this examination lies in the special nature of adult education and good adult education instruction. The two adjectives "good" and "adult" require further explanation. Good is based on a set of values. In this case "good" refers to instructional behaviors which reflect democratic values, the raising of consciousness, the development of self-worth, responsible autonomy, initiative, the furthering of integrity and moral behavior, and of course, intellectual development and work competence.

The adjective "adult" is used to differentiate this form of instruction from child-youth education. This is a matter of shading rather than clear and sharp distinctions. The major difference lies in the degree of maturity the individual has achieved. This is both a developmental and learned or socialized phenomenon. The criteria that are set out stress a mutuality that cannot be expected in child-youth education. Until the ego identity phase of life has been passed there cannot be a relationship of mutuality between learner and teacher. Once the learner has passed this stage of life, the teacher must accept the reality that a profitable and healthy relationship can only exist if teacher and student see each other in a relationship of adult-to-adult.

This aspect of the evaluation study relates to the GD-TSS program in the following way. The *GD-TSS Standards for Course Content and Mode of Instruction* (Wisconsin Board of Vocational, Technical and Adult Education, 1978) indicate two major areas of concentration in the course objectives. They are the provision of information about the relationship between the use of alcohol and its effects on driving, and the facilitation of the development of personal knowledge and growth among the participants as this relates to their driving performance. The GD-TSS program has been established in a group dynamics format in the belief that such a format is best suited to the achievement of the course objectives. Within such a format, the instructor assumes a potent role in carrying forth the purpose of the group. He determines, through the roles and functions he performs, the climate of the group and the potential for the participants in the group to meet the group's objectives.

One measure of the instructor's contribution to the group's meeting the program objectives is through the analysis of the roles he plays as group leader. "The leader's role in the group process should be that of helper, guide, encourager, consultant, and resource -- not the model of the traditional teacher who is transmitter, disciplinarian, judge and authority" (Boyd, 1979).

This chapter provides the methodology and data for the performance of the sample instructors within the framework of their roles as group leader.

METHODOLOGY AND DATA COLLECTION

This section of the chapter will provide information on the specifications used to gather data on teacher roles, the coder training procedures, and the coding procedure.

Coding Specifications

The specifications for this analysis are derived from "The Teacher

Role Model" (Boyd, 1969). In this paper two interlocking dimensions of the role behaviors of a teacher are distinguished. These are the instrumental and the expressive dimensions. Instrumental behavior is goal-oriented, reality-based, and work-directed while expressive behavior is concerned with gratification, and deals with the social-emotional or psychosocial aspects of instruction.

Under the instrumental dimension are located the roles the teacher plays when he/she functions as programmer, guide and resource person. Under the expressive dimension is located the role of facilitator. Each of the roles is also considered to have a positive and negative aspect, so that, for example, a teacher may fulfill the role of programmer in ways that facilitate or impede the student's learning experience.

The following definitions of the teacher roles were used in this examination of the GD-TSS program.

Programmer _(Positive)_ -- The orientation here is one of shared and explained planning. There is an openness and willingness, even encouragement, for the students to enter into programming of experiences and class content and activities. The instructor is willing to give reasons for his suggestions and plans in the structuring of the curriculum.

Any input that focuses on any aspect of programming (curriculum) is coded here. This includes evaluation of past and on-going programming so long as it is not focused on the solution or the working through of a specific problem.

Programmer _(Negative)_ -- There is evidence that the instructor wants to control the content and activities that are to be used to construct the course. The instructor is defensive and possibly even hostile to any questioning of his stated curriculum.

Guide -- The role or function of Guide is divided into three categories.

1. Synthesis (Positive). When the instructor is helping the student to integrate and build knowledge, the instructor is said to be helping with synthesis. Here the instructor helps the student to put information, ideas, experiences together. This can be done through questions or by direct suggestions.

Synthesis (Negative). If the instructor imposes his interpretations on the student, the instructor is functioning in a negative manner. Any way in which the instructor blocks the development of insights by providing his own interpretation or fails to make clear to the student why he is pursuing his type of questioning is the negative aspect of this role.

2. Analysis (Positive). After a student proposes a suggestion or idea, the instructor helps the student to see where he went wrong in reaching his conclusion. Here the instructor tries to help the student see where he may have gone wrong in structuring the knowledge as he has. This can be done through questions or by direct statements. Both questions and statements must be in an accepting and helpful tone and not one in which the instructor is putting the student down.

Analysis (Negative). This is similar to the definition of Synthesis (Negative), expect that it deals with working back from conclusions.

3. Mixture of Synthesis and Analysis (Positive). There may be occasions when it is difficult to differentiate between synthesis and analysis, yet the input is clearly in the category of Guide. That is, the instructor is clearly trying to help the student to work through the learning task. The emphasis must be clearly on the cognitive aspects, that is the problem solving component of the activity.

Mixture of Analysis and Synthesis (Negative). The negative aspect of this role exists if the instructor imposes his interpretations on the student. The instructor's behavior is coded negative whenever he/she blocks the development of the student's divergent thinking.

Resource Person -- The instructor may provide information either because it is requested or because he believes it would be helpful. This latter would have to be assumed. Behavior which clearly shows his provision of information would be coded in this category. This may appear as a brief statement or as a small lecture. There are two subsections in this category: Solicited and Unsolicited.

1. Solicited (Positive). When the instructor is asked by a student for information and provides the information, the instructor acts in the role of a resource person.

Solicited (Negative). This applies only to the Solicited category. Faking an answer or ignoring a request for information by a student belongs in this category.

2. Unsolicited. When the instructor provides information where there has been no direct request, the instructor is functioning in this category. Unsolicited material is not coded as negative or positive. The instructor's ideas, valuation statements, opinions, and facts can be coded in this category, but these must be seen as clearly cognitive inputs and not judgements about the students' contributions.

Facilitator -- This role is distinguised from the role of Guide in that it deals with the social/emotional or psychosocial aspects of instruction. The target of inputs in this role can be either the individual or the group. When this role is used, the instructor is trying to create an atmosphere of shared and committed learning. The role of Facilitator is divided into two categories: Cognitive and Social/Emotional.

1. Cognitive. Behavior by the teacher which acts to improve the climate for problem solving and involve the members of the class in the discussion are placed in this category.

2. Social/Emotional (Positive). The emphasis of utterances coded in this category is that they relate to constructing a working relationship between learner and instructor that is founded on a partnership freed from authoritarian education. This role includes the instructor's sensitivity to the emotional aspects of a student's contribution, his recognition of a working partnership between teacher and students, and relating to the students in an adult-to-adult manner.

Social/Emotional (Negative). This behavior cannot really be termed facilitating -- it is the opposite of facilitating. It is characterized by repressive, authoritarian attitudes. These are manifested in such activities as moralizng, preaching, and pronouncements. They show no sensitivity or sharing of the responsibility for learning.

CODING PROCEDURES

The coding of the ten GD-TSS groups employed the following procedures. Each of the four project staff members and the Director was assigned two groups to code. The primary sources for coding data were the videotape recordings of the meetings of the classes. When the videotape was not usable, the coder would then use the audiotape recording of the group.

The coding itself followed the specifications for coding detailed in the "Recording Form for Teacher Sessions." These specifications consist of three parts. The first is a definition of an "utterance." The utterance was used as the coding unit. An utterance is one input, no matter how long it is, as long as the content of the input remains the same. Changes in the input which would require coding the input in a different category are considered as marking a new utterance. Only the teacher's utterances were coded.

The second part of the specifications consist of the definitions of the negative and positive aspects of each role. These have already been presented in the Specifications section of this chapter.

The third part consists of the specifications themselves. These are exemplars of the roles the teacher plays and serve as specific guides to the coders. An example will make this clear. A specification for Programmer (Positive) is "The teacher provides situations in which the adult learner can assess his/her present level of competencies as the basis of developing programming."

The coding itself was done in the following manner. As the coder viewed the videotape a check-mark was placed in the appropriate column of the coding form for each teacher utterance. The coding form provides a place where utterances in each of the positive and negative aspects of each category and sub-category can be recorded.

RELIABILITY

When the coders could cite from memory the specifications of all the roles in the model they were given short segments of classroom interactions to code. This training procedure was designed to achieve 100 percent agreement among the coders. When this level of achievement was obtained the coders were then assigned the video tapes of the instructors each was to code. During the coding period two reliability checks were run. The Kendall Test of Coefficient of Concordance was employed. This test was used because it would provide a reading on agreement among the five coders making decisions over fourteen categories. On both tests spaced at different times in the coding of the tapes the probability of agreement was beyond the .01 level. This means that there was a high level of agreement and therefore reliability among the five coders.

DATA ANALYSIS

The data from the coding of teacher role inputs were analyzed in the following manner. The check-marks for each of the coding categories were tallied. The number of teacher utterances in each category as a percentage of the total number of teacher utterances for that session was then computed.

FINDINGS

The summary data for the roles the teachers performed for all groups and class meetings in the sample are presented in Table 3.1. This table provides the percentage of teacher utterances for all coding categories by the positive and negative aspects of each category. It also presents the average percentage for the positive and negative aspects of each category for all teachers, and shows the range from the highest to the lowest percent of the positive and negative aspects of each category for each instructor. The totals do not sum to 100% due to rounding error. This table thus provides data on a teacher's performance of a teaching role in terms of the percentages of utterances that he provided as inputs into the GD-TSS classes.

The summary rows of Means and Range at the bottom of the table provide insightful information about the teaching instructional process within the groups. The means point up the weights given to the various roles. The mean for the role of Unsolicited Resource person is noticeably larger than any other mean. This indicates this role was taken frequently by the instructors. The two next highest means are those for Guide (positive analysis) and Facilitator (social/emotional negative). The first of these two roles indicates constructive instructional behavior while the latter role would be one that is considered destructive to good and effective teaching. The mean for the role of Guide (synthesis) is surprisingly low in view of the fact that

Table 3.1

Percentages of Instructor Inputs for Various Teacher Roles Over All Sessions for Each of the Ten Groups

Group Number	Programmer		Guide						Resource			Facilitator			Total[a]
			Analysis		Mixture		Synthesis		Solicited		Unsolicited	Cognitive	Social Emotional		
	+	-	+	-	+	-	+	-	+	-			+	-	
1	1.0	5.0	2.2	1.0	0.0	0.0	13.6	4.6	3.2	1.2	21.2	18.3	12.9	16.4	100.6
2	6.2	16.8	14.1	1.2	1.4	.3	7.3	9.0	2.2	0.3	17.3	4.7	7.7	12.1	100.6
3	1.0	2.6	9.9	1.4	0.0	0.0	17.1	2.0	4.2	0.0	19.7	26.5	10.5	5.5	100.4
4	15.7	.6	26.5	1.4	0.0	0.0	9.0	0.1	9.7	0.0	21.5	5.6	6.9	2.2	99.2
5	22.7	1.7	23.6	3.0	0.1	0.0	5.4	.9	6.5	0.2	23.4	3.7	2.9	5.7	99.8
6	1.1	18.5	10.9	1.9	0.0	0.0	8.1	3.0	9.6	1.4	15.0	4.0	5.9	20.5	100.0
7	4.3	8.5	15.3	9.8	0.0	0.0	4.5	3.7	5.8	1.8	19.4	6.3	7.6	11.5	99.0
8	2.2	1.2	29.4	0.7	0.0	0.0	1.9	1.3	7.1	.8	25.4	8.7	15.1	6.0	99.3
9	2.9	16.8	12.4	17.0	0.0	.1	4.8	6.7	2.0	0.0	20.0	6.4	7.1	3.2	99.4
10	4.1	13.6	17.5	3.3	0.6	0.0	5.2	4.0	4.0	0.7	30.3	2.5	9.4	6.8	102.0
Mean	6.1	8.5	16.2	4.1	.2	.04	7.7	3.5	5.1	.6	21.7	8.7	8.6	11.0	99.9
Range	1.0-22.7	.6-18.5	2.2-29.8	.7-17.0	0.0-1.4	0.0-.3	2.0-17.1	.7-9.0	2.0-9.7	0.0-1.8	15.0-35.0	2.4-26.5	2.9-15.3	2.2-20.6	99.0-102.0

[a] Totals do not sum to 100% due to rounding error.

the GD-TSS program has been designed to help learners develop insights into their behaviors. The greater mean for the negative as compared with the positive aspect of the role of Programmer is noted.

The range among the instructors in the use of the different roles reveals a wide variation in instruction. The role of Programmer varies from 1 percent for one instructor to 22.7 percent for a second instructor. In like manner Guide (positive analysis) ranges from 2.2 percent to 29.8 percent between two instructors. This variation can be examined in greater detail by inspecting the data in the body of the table on the individual instructors. For example, just over 3 percent of the total number of utterances for the instructor of Group 1 are in the Guide (analysis), while over 25 percent of the utterances for the teachers in Groups 4, 7, and 8 are in this category. The teacher for Group 1 has placed his emphasis in the role of Social/Emotional-Facilitor where about one-third of his utterances fall.

A more detailed examination of the negative aspects of the teacher roles shows that for four of the instructors over thirteen percent of their utterances are in the negative Programmer category; this is for Groups 2, 6, 9 and 10. Four instructors have eleven and one-half percent or more of their utterances falling into the negative aspect of the Social/Emotional-Facilitator category. These are the teachers for Groups 1, 2, 6 and 7.

The data presented in Table 3.2 were reorganized to identify more readily the total inputs of positive and negative instructional components. Column one contains totalled percentages for all the positive behaviors for each instructor as present in Table 3.1. In an identical manner all the percentages of the negative behaviors were summed and are shown in Column Two. Unsolicitied inputs and Facilitator (cognitive) inputs are recorded in columns three and five respectively. These two types of inputs were not classified as positive or negative and, consequently, were treated in separate categories. Column four contains the percentage totals of all inputs the instructors made as resource persons. These percentage totals were presented to reveal the amount of instructional behavior given to the role of information given. Over 28% of the utterances input into the sessions were coded as negative for six of the teachers. This was for Groups 1, 2, 6, 7, 9, and 10. This means that for these teachers more than one in four inputs was a negative one. The range in the percentage of negative utterances for all teachers was from a low of 4.2% to a high of 45.4%. The mean percentage of negative utterances is 25.87%.

This table also presents the summary data for the Unsolicited-Resource and Cognitive-Facilitator roles. These roles do not have positive or negative aspects associated with them. It is important to note that the category of Unsolicited-Resource is one in which the teacher provides information without this being requested by as student. As such this category includes lecturing, talking and other inputs by the teacher which may impede group dynamics. When the negative aspect and the Unsolicited-Resource groups are summed it is found that for six of the teachers about 50% or more of their utterances fall into one of these two categories. These are Groups 1, 2, 6, 7, 9 and 10. These are

Table 3.2

Total Percentage of Positive and Negative Aspects of Teacher Roles for All Ten Groups for All Sessions

Group	% Total Positive	% Total Negative	% Unsolicited-Resource[a]	% Negative Plus % Unsolicited Resource	% Cognitive-Facilitator[a]
1	32.9	28.2	21.2	49.4	18.3
2	38.9	39.7	17.3	57.0	4.7
3	42.7	11.5	19.7	31.2	26.5
4	67.8	4.3	21.5	25.8	5.6
5	61.2	11.5	23.4	34.9	3.7
6	35.6	45.4	15.0	60.4	4.0
7	38.0	35.3	19.4	54.7	7.6
8	55.7	10.6	25.4	36.0	8.7
9	29.2	43.8	20.0	63.8	6.4
10	40.8	28.4	30.3	58.7	2.5
X	44.38	25.87	21.32	47.19	8.8
RANGE	29.2-67.8	4.3-45.4	15.0-30.3	25.8-63.8	2.5-26.5

[a] This category does not have positive or negative aspects.

the same groups as those with the high percentage of negative utterances.

The last column in Table 3.2 which contains the inputs of instructors in the role of Failitator of cognitive learning shows a wide range among instructors from 26.5 percent to 2.5 percent. These data shows that for most instructors (excluding groups one and three) the percentage of behavior in this category averaged around 5 percent of the total input of instructor behavior.

The variation in the case of roles can be seen in the uses that all instructors make of the different roles. These data are presented in Table 3.3 As this table indicates, the instructors made extremely heavy use of the roles of Unsolicited-Resource, Analysis-Guide, and Social/Emotional-Facilitator. About three in five utterances of every input of the teachers was coded in one of these three categories.

Table 3.3

Rank Order of the Summed Mean Percentage of Positive and Negative Aspects of Each Teacher Role for All Ten Groups for All Sessions

Rank	Teacher Role	Positive And Negative Summed Mean Percentage
1	Unsolicited-Resource	21.7
2	Analysis-Guide	20.3
3	Social/Emotional-Facilitator	19.6
4	Programmer	14.6
5	Synthesis-Guide	11.2
6	Cognitive-Facilitator	8.7
7	Solicited-Resource	5.7
8	Mixture-Guide	0.204

These data are further differentiated in Table 3.4. Examination of this table shows that the role of Unsolicited-Resource remains in first place. The positive aspect of Analysis-Guide is in second place, and the negative aspect of Social/Emotional-Facilitator is in third place.

These were the same rankings of the roles when they were arranged according to their summed positive and negative aspects as shown in Table 3.3 It can be seen here that the majority of the utterances in the third ranked role Social/Emotional-Facilitator are in the negative category. This behavior accounts for about one utterance in ten that the teacher inputs into the class.

Table 3.4

Rank Order of the Mean Percentage of Positive and Negative Aspects of Each Teacher Role for All Ten Groups for All Sessions

Rank	Teacher Role	Mean Percentage
1	Unsolicited-Resource	21.7
2	Analysis-Guide (Pos)	16.2
3	Social/Emotional-Facilitator (Neg)	11.0
4	Cognitive-Facilitator	8.7
5	Social/Emotional-Facilitator (Pos)	8.6
6	Programmer (Neg)	8.5
7	Synthesis-Guide (Pos)	7.7
8	Programmer (Pos)	6.1
9	Solicited-Resource (Pos)	5.1
10	Analysis-Guide (Neg)	4.1
11	Synthesis-Guide (Neg)	3.5
12	Solicited-Resource (Neg)	0.6
13	Mixture-Guide (Pos)	0.2
14	Mixture-Guide (Neg)	0.04

This examination of the roles the teachers perform in conducting the GD-TSS classes can be summarized in three points. First, there is a large variation among the teachers in their use of the different teacher roles. Second, a large number of utterances were coded in the negative aspects of the teacher role categories. Third, there was a heavy use of the Unsolicited-Resource role. These findings indicate that the teaching styles of the GD-TSS instructors vary markedly over the several roles that they take in the groups. The significantly high amount of negative and unsolicited teacher inputs can impede the process of group dynamics in the classes.

DISCUSSION

The purpose of the examination of the use of the various teacher roles by the instructors in the GD-TSS program was to determine if the teachers in the sample were following good adult education practice. Good adult education practice was defined as the utilization of the positive aspects of the various teacher roles.

The findings highlight three areas of concern. These were, first, that there was a great deal of inconsistency among the teachers in their use of the several instructional roles. Second, the teachers were characterized by a large number of negatively coded inputs. For six of the ten groups in the sample 28% or more of the teacher's utterances fell into the negative aspect of a categoy. Third, a high percentage of inputs were in the Unsolicited-Resource category. This category represents inputs from the teacher that provide information not requested by a student.

These three findings are considered as reflecting poor adult education practice. This is so for the following reasons. The lack of consistency among the teachers in their use of the teacher roles and in the frequency of positive and negative utterances indicates that there is a wide range of quality in the instruction that is being offered in the GD-TSS program. The findings suggest that some instructors are following good adult education practice whereas others are demonstrably poor teachers by these criteria.

This implies a lack of a standard of quality of instruction for the groups. The person who is convicted of an OWI offense will have a beneficial or detrimental experience depending upon the group to which the person happens to be assigned. This is decidedly contrary to the intention of the _Group Dynamics-Traffic Safety School Standards for Course Content and Mode of Instruction_ (Wisconsin Board of Vocational, Technical and Adult Education, 1978). These _Standards_ are an attempt to establish consistent teaching of quality and merit in the GD-TSS program based on sound principles of adult education and group dynamics. The examination of the use of teacher roles finds that adherance to the thrust of these Standards is lacking.

This general statement concerning the consistency and quality of the teaching in the GD-TSS program is supported by the findings of the study in two areas of concern. These are the frequency of negative utterances and the use of the Unsolicited-Resource role.

The percent of negative inputs for six of the ten instructors was over 28%. As Table 3.4 indicates, the third highest ranked teacher role is that of the negative aspect of Social/Emotional-Facilitator, and the sixth highest is that of the negative aspect of Programmer. Together these two roles account for about 20% of the instructors inputs to the group. Characteristics of the teacher which are coded as negative Social/Emotional-Facilitator are these: an authoritarian attitude; lack of account of the emotional aspects of a student's contribution; discouraging discussion; acting in a parent-to-child or boss rather than partner relationship with the students; and the use of such devices of control as sarcasm, ridicule, and patronizing. The negative Programmer role is one in which the teacher dictates the content of the course based on his assessment of the students' needs and requirements without either explanation of this determination or opportunity for the student to question this determination.

These two highly ranked negative roles were singled out to serve as examplars of the nature of the negative inputs on the part of the teacher. As these characteristics clearly indicate, negative inputs serve to impede and block the free and positive interaction among the students that is the basis of group dynamics. These inputs are in direct violation of the GD-TSS Standards dealing with the mode of instruction. The Standards state that "if students get the impression that their ideas are likely to be criticized or 'shot down,' their attitude will be 'Why take a chance? Why say anything?'" (Wisconsin Board of Vocational, Technical and Adult Education, 1978, pp. III-1). This negative attitude toward participation in the group could readily be brought about by the high proportion of negative inputs from the teachers. This is especially true in the six groups that are the focus of this criticism.

The other major finding is that a high percentage of inputs were in the Unsolicited-Resource category. As Tables 3.3 and 3.4 reveal this role is ranked highest among all the roles performed by the teacher. Over one input in five by the teachers fell into this category. Utterances coded in this category are those in which the instructor provides his own ideas, valuation, statements, opinions, and facts which are cognitive inputs. These are inputs which are not in response to a student's question.

The frequent use of this role is one that blocks group interaction and group dynamics. The teacher controls the content often in disregard of the needs or interests of the students. It was quite clear from the comments of the coders that the teachers in the sample very frequently used this role to lecture the students, control the direction of the discussion, and otherwise communicate the teacher's opinions and beliefs in an authoritarian manner. The outcome of these inputs is control of the class meetings and impediment to group dynamics. It is difficult for the students to interact as a group when the teacher does so much talking. Again, this type of instructor behavior violates the principles of group dynamics and effective adult education that is the basis for the GD-TSS program.

The GD-TSS program was established on the premise that "if students themselves participate in finding solutions to their problem as a cooperative effort, they will take more responsibility in applying those solutions" (Wisconsin Board of Vocational, Technical and Adult Education, 1978, p. I-1). This clearly argues for a program in which the students can express and examine their opinions, ideas, knowledge and feelings in a free, democratic atmosphere so that increased understanding and knowledge would enable the student to modify his or her drinking and driving behavior.

It was found that these basic assumptions were violated in a significant number of instances. The teachers in the sample were not consistent in following good adult education practices that would foster the necessary involvement on the part of the students that would lead to behavioral change. Further, large numbers of inputs from the teachers were in negative roles and roles that would tend to block group participation. The conclusion to be arrived at from this examination of teacher roles is that the teaching done by the majority of instructors in the sample could be improved. Improvement in those areas of instruction considered in this part of the Evaluation Study would do much to realize the potential of the GD-TSS program.

CHAPTER FOUR

Participant-Instructor Verbal Interaction in CD-TSS Classes

THE EVALUATION QUESTION

The purpose of this section of the Evaluation Study was to examine classroom verbal interaction patterns. These patterns were examined in relationship to cognitive achievement and certain educational and experiential characteristics of GD-TSS instructors. The data for this part of the report was collected during the pilot phase of the Evaluation Study.

An investigation of the verbal behavior of instructors and students that was directly related to the psychosocial climate in GD-TSS classes required an observational category system. Flander's Interactional Analysis Categories (FIAC) was selected as the system to describe the spontaneous verbal communication in GD-TSS classes. The categories used in this process allowed for the arrangement of data into a useful display for the analysis of interaction patterns.

The cognitive achievement was measured by the difference in achievement scores on a test taken prior to attending and the same test taken after completing the program. The instrument was developed by Malfetti and Winter (1976). The data on the instructor was taken from an inventory form specifically developed for this study.

In an extensive search of the literature, no studies could be found which had done systematic research on the DWI/OWI instructors. While criteria for certification as a GD-TSS instructor is articulated, no studies to date have been done on the effects of instructors on the group achievement or how the characteristics of the instructor affects the group interaction. The following points, then, can be made: 1) there have been only superficial demographic studies on the OWI instructors; 2) there have been no studies on OWI instructors' personal, educational, or experiential characteristics; and 3) there have been no studies on the relationship of the characteristics of the instructor as a variable in the Group Dynamics-Traffic Safety School approach.

THE IMPORTANCE AND BACKGROUND OF THE EVALUATION QUESTION

The analysis of the instructional process has historically fallen into two categories. The first is that of the individual interested in teaching, who observed a class and then on a subjective basis, described whether or not this was a good or poor instruction. The second type of analysis applied to teaching is that of analogous reasoning of research done outside the actual classroom. While these subjective judgments and analogies may or may not be valid, a more desirable method of analysis of instruction is a systematic observation of instructional activities. It also seems logical that the best place to study the process of instruction is in an actual classroom. In order to extract any meaning from an analysis of the process of teaching and learning within a classroom, it is necessary to attempt to objectively quantify classroom behavior. A significant portion of classroom time is normally spent in verbal interaction, it follows that a quantitative study of the chain of verbal events, which occur one after another in a classroom, can provide sound data upon which to describe precisely what types of interactions are occurring in the classroom.

Interaction analysis, used in this study, refers to an observation system that codes spontaneous events in a classroom, arranges the data into a meaningful display, and then analyzes the results in a way that teaching and learning patterns can be studied. A system of interaction analysis includes a set of categories for describing interaction, a procedure for observation, steps for tabulating data in order to arrange a display of data which aids in describing the original events, and suggestions for applying the analysis techniques to a classroom setting. An observer sits in a classroom, or views a video playback, or listens to a audio recording of classroom interaction. The observer records his/her observations. Later the code symbols are decoded and displayed in a manner that allows some analysis of the data collected. There are currently several systems of interaction analysis in use but the one used in this study was Flanders Interaction Analysis System described by Amidon and Flanders (1967). Briefly, Flanders instrument consists of a system of ten categories for interaction analysis. Seven of the categories are assigned to teacher talk, two to student talk, and one to short periods of silence or confusion. Statements are classified as direct if they tend to restrict the student participation through teacher opinions, directions, and criticism, or indirect if they tend to expand participation through teacher praise of clarification of student feelings.

This method of classifying interaction through observation is used to quantify the qualitative aspects of verbal communications. The entire process becomes a measure of teacher influence based on the assumption that most teacher influence is expressed through verbal statements and that most nonverbal influence is positively correlated with the verbal.

METHODOLOGY

Participant and Instructor Populations

The original population included the teachers and particpants from twenty-seven group dynamics classes from throughout the state vocational-technical system. The teachers of the twenty-seven classes had all been provisionally or regularly certified as group dynamics instructors by the Wisconsin Division of Motor Vehicles.

To establish the generalizability of the results of this study to the entire population of Wisconsin GD-TSS instructors and their classes, a comparison was made of participating instructors with the instructors not participating in the interaction analysis.

A second set of comparisons was made of the students in audio taped classes with students in GD-TSS classes that were not audio taped for verbal interaction analysis.

Data Collection

The data collection procedure consisted of three phases. In phase one demographic data were collected on participants and instructions through the use of inventory forms. The second phase involved the administration of instruments used for assessing pre-course to post-course changes in participants' knowledge of alcohol and its effect on driving. Finally, 150 minutes of each of the verbal selected GD-TSS classes were audio taped for interaction analysis.

Instruments

A standard set of three instruments was used on all the participants at each of the twenty-seven sites. The first instrument was administrated before or at the first class session and contained personal and demographic information that was used as a basis for comparison between individuals participating in this study and those not participating. Frequency counts and corresponding percentages were calculated on personal, educational, marital, employment, and driving related variables.

Data requested on the inventory for GD-TSS instructors were chosen for their relevance and potential value to teacher certification as outlined in the Group Dynamics-Traffic Safety School manual, Standards for Course Content and Mode of Instruction, Department of Transportation, January 1978. The data on instructors were also chosen for their compatibility with instructor data requested in previous studies related to instruction in group dynamics classes as revealed in the review of related literature. The data requested in this inventory included such variables as age, sex, level of education achieved, college major or minor, participation in alcohol education training programs, teaching experience, teaching methods courses taken, participation in group dynamics workshops.

The other two data collection batteries were completed by each of the group-dynamics participants, one before and one after the program. The pre-course instrument contained two separate sections: a personal data form and one knowledge test. The post-course battery contained, the one test for knowledge.

These instruments were taken from Counseling Manual for DWI Counterattack Programs, by Dr. Malfetti and Dr. Winter, (1976). The instruments found in this manual fit the knowledge criteria for this study. The instruments were used in assessing pre-course to post-course changes.

The pre-test data instrument (Participant-Data Collection I) consisted of forth-three questions and took from five to ten minutes to complete depending upon the individual. No special instructions were needed other than the introduction at the top of the data questions.

This information was read to all participants, as well as the instruction found in the Counseling Manual for DWI Counterattack Programs (p. 423).

Knowledge inventory appears as items 24-43 in Data Collection I and items 1-20 in Data Collection II. This knowledge test was an objective instrument comprised of 20 multiple-choice items to measure knowledge of relationships between alcohol and driving. The test is a refinement of the original 40 item Drinking and Driving Knowledge Inventory developed by Simon (1972).

The tape recorded data from the group dynamics classes were subjected to interaction analysis using Flanders Interaction Analysis Categories (FIAC). These categories are designed to code the verbal behavior of instructors and participants within a classroom setting. The Flanders' system is concerned with verbal behavior only, primarily because it can be observed with higher reliability than can nonverbal behavior. The assumption is made that the verbal behavior of an individual (teacher) is an example of his/her total behavior.

In the Flanders' system of interaction analysis observation, all instructor statements can be classified as either indirect or direct. This classification fives central attention to the amount of freedom the group dynamics instructor grants to the participants. In a given situation, the instructor has a choice to be direct, minimizing the freedom of the participant to respond, or to be indirect, maximizing the freedom of the participants to respond. This instructional choice depends upon many factors, among which are the teacher's perceptions of the classroom interaction and the goals of the particular learning situation.

In order to make interaction in the classroom meaningful, the Flanders' system also provides for categorizing of student talk. A third major section, that of silence or confusion, is included in order to account for the time spent in behavior other than that which can be classified as either teacher or student talk.

Therefore, statements that occur in the classroom can be categorized in one of three major sections: (1) teacher talk, (2) student talk, and a separate category, (3) silence, confusion or anything other than teacher or student talk.

The larger sections of teacher and student verbal behavior are subdivided in order to make the total pattern of teacher-student

TEACHER TALK	INDIRECT INFLUENCE	1.	ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included.
		2.	PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying "uhhuh?" or "go on" are included.
		3.	ACCEPTS OR USES IDEAS OF STUDENT: clarifying building or developing ideas or suggestions by a student. As teacher brings more of his own ideas into play, shift to category five.
		4.	ASKS QUESTIONS: asking a question about content or procedure with the intent that a student answer.
	DIRECT INFLUENCE	5.	LECTURES: giving facts or opinions about content or procedure; expressing his own idea; asking rhetorical questions.
		6.	GIVES DIRECTIONS: directions, commands or orders with which a student is expected to comply.
		7.	CRITICIZES OR JUSTIFIES AUTHORITY: statements intended to change student behavior from nonacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing, extreme self-reference.
STUDENT	TALK	8.	STUDENT TALK-RESPONSE: talk by students in response to teacher. Teacher initiates the contact or solicits student statement.
		9.	STUDENT TALK-INITIATION: talk by students, which they initiate. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.
		10.	SILENCE OR CONFUSION: pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.

Figure 4.1 Flanders Interaction Analysis Categories

interaction more meaningful. The two subdivisions for teacher verbal behavior, indirect and direct teacher talk, are further divided into smaller categories. Indirect influence consist of four observation categories: (1) accepting feelings, (2) praising or encouraging, (3) accepting ideas, and (4) asking questions. Direct influence is divided into three categories: (5) lecturing, (6) giving directions, and (7) criticizing or justifying authority. Student talk is divided into only two categories: (8) responding to teacher, and (9) initiating talk. All categories are mutually exclusive; yet together they are totally inclusive of all interaction occurring within a classroom. There is no scale implied by these numbers. Each number classified a particular kind of communication event. Writing these numbers down during an observation is an enumeration--not a judgement of a position on a scale.

Utilizing the foregoing interaction category descriptions, a trained observer is able to collect reliable data regarding classroom behavior. First the observer spends about five-minutes becoming orientated to the situation before actually beginning to categorize interaction. He/she then has a feeling for the total atmosphere in which the teacher and students are working. Next the observer begins to listen to the verbal interaction in a classroom and every three-seconds notes the category number for the interaction he/she has just observed. These numbers are usually recorded in columns in the sequence of occurrence--at a rate of approximately twenty per minute. It is important hat the observer preserves the sequence of numbers as they are recorded.

The interaction variables studied were:

Percentage of teacher talk. The percentage of tallies occurring in the seven teacher talk categories.

Percentage of student talk. The percentage of tallies occurring in the student talk categories.

Percentage of silence of confusion. This shows the percentage of tallies occurring in the silence or confusion category.

Indirect influence percentage. This gives a measure of use of extended indirect influence by the teacher.

Extended acceptance percentage. This figure reflects extended acceptance or use of student ideas.

Extended questioning percentage. This figure represents extended questioning by the teacher.

Extended lecturing percentage. This figure represents extended lecturing by the teacher.

Criticism percentage. This indicates the teacher's emphasis on criticism and direction.

Student response percentage. This figure represents extended talk by students in response to the teacher.

Initiated talk percentage. This figure represents extended student-initiated talk.

Percentage of teacher talk. The total percentage of each of seven different kinds of teacher talk occurring in the classroom.

Percentage of student talk. The total percentage of each of two different kind of student talk occurring in the classroom.

Indirect ratio. The ratio of indirect teacher statements to direct teacher statements.

Revised indirect ratio. This removes the effect of questioning and lecturing from the indirect ratio, thereby indicating whether the teacher uses a direct or indirect approach to motivation and control.

Indirect to direct ratio. This describes the teacher's responses to students as a ratio of indirect responses to direct responses.

These interaction variables are all produced by the FLANDERS computer program described in Skuldt and Lange (1971).

RELIABILITY AMONG CODERS

The training procedures set out by Amidon (1967) were followed in this study. Prior to coding of the data from the study the coefficients of internal agreement of .87, .94 and .84 were obtained for test 1, 2 and 3 respectively. Reliability was again examined during the coding period. Three tests were run and the results were .87, .88 and .88 respectively for the three spaced tests.

ANALYSIS OF THE DATA

The participant-instructor inventories, the pre-test/post-test instruments, and the audio tapes were analyzed in four parts.

Frequency counts and corresponding percentages were calculated for each of the variables on the inventory form for all of the instructors. These variables were then used to describe the instructor population in addition to providing a guideline for the dichotomizing of the variables to be used in the statistical analysis of the data. To establish a norm-like basis for comparative purposes, an average for each of the verbal interaction variables was also generated for the studied instructor population.

Part two of the data analysis included a comparison of the mean values for certain interaction variables from other types of classes with the corresponding means for interaction variables for the instructors of the GD-TSS classes.

A third comparison was made of the interaction patterns of GD-TSS classes and changes in participants' "scores" on the knowledge pre-test/post-test. Individual "gain scores" on the knowledge between the pre-test and post-test were calculated and averaged for each class with a statistical comparison made of each class through a one-way analysis of variance utilizing the F-ratio. Where the assumption of normality was violated, the nonparametric Kruskal-Wallis analysis of variance by ranks test was substituted.

The final section of the evaluation was to compare the interaction patterns of GD-TSS classes and instructors who had different personal, educational, and experiential characteristics and was accomplished through an extensive series of statistical comparisons. These comparison were tested for statistical significance at the .05 level though the computation of an F-ratio from a two group analysis of variance or the Kruskal-Wallis test for equality of mean ranks.

THE FINDINGS

Comparison of Participant Classes with Non-Participant Classes

In order to establish any creditability in generalizing the results of this study to the entire population of Wisconsin GD-TSS instructors and their classes, a comparison of participating teachers with non-participating teachers was made. The intent was to determine if there were any differences between the 24 instructors of the audio taped groups and the fifty-three non-participating members of the teacher population. When comparing the two groups using demographic variables, a tabulation of the frequencies and corresponding percentages resulted in a set of comparisons. Although some differences did occur in these comparisons, the only difference of any magnitude occurred in the number of GD-TSS sections taught. The non-participating instructors had taught less sessions than the participating instructors.

A second set of comparisons was made of audio taped participating students and non-participating student population members. A frequency tally and percentage calculation was again performed on these data. Using this measure of comparison, a slight difference did occur in the ages of the population members. The non-participating population contained a higher percentage of students under twenty-five years of age and as a result the non-participant classes held an average of 28.5 years compared to 31.3 years in the classes of participants.

It can be concluded from the analysis of this data that whatever differences appear to exist in the demographic data they are insignificant.

Instructor Inventory Data

The data collected using the instructor inventory was divisible into qualitative and quantitative categories. Table 4.1 presents a summary of the qualitative data collected and dichotomized. Frequency counts and corresponding percentages are presented for each of the variables. The dichotomies were naturally occurring except on the question of certification where there was only one instructor not holding a certificate to teach group dynamics classes. None of the qualitative variables were divided equally. The largest disproportions were found in the sex of the participating instructors (21 males, 3 females), attendance at courses or workshops on the group-dynamics process (21 had, 2 had not), and certification to teach group dynamics (23 were certified).

A summary of quantitative data from returned instructors' inventories is found in Table 4.2. Ranges as well as measures of central tendency are shown for each of the quantitative variables. The mean age of instructors was 39.25 years, with a range from 27 to 66 years. The audio taped instructors had a minimal amount of semester hour credits in safety (8.21), but on the average approached a minor in counseling (24.96 semester hours).

Table 4.1

Summary of Qualitative Data From Returned GD-TSS Teacher Inventories*

Qualitative Variables		Number	Percent
Sex	Male	21	87.5
	Female	3	12.5
Education	Less than MA/MS	6	25.0
	More than MA/MS	18	75.0
Have taken courses in safety education	Yes	19	79.2
	No	5	20.8
Accreditation in Alcohol education	Yes	18	75.0
	No	6	25.0
Attendance at courses or workshops in GD-TSS	Yes	22	91.7
	No	2	8.3
Full-time teacher	Yes	8	33.3
	No	16	66.7
Certified	Yes	23	95.8
	No	0	0.0
	Unknown	1	4.2

*N=24

Table 4.2

Summary of Quantitative Data From Returned GD-TSS Teacher Inventories*

Quantitative Variables	Range	Mean	Standard Deviation
Teachers' age (years)	27-66	39.25	9.23
Credits in safety education	0-35	8.21	10.48
Sections of GD-TSS taught	4-96	29.87	25.71
Teaching experience in GD-TSS (years)	1- 9	4.13	2.23
Other teaching experience (years)	0-27	8.96	7.29
Semester hours of counseling	0-92	24.96	22.29
Semester hours of curriculum development	0-40	16.79	12.69
Years since last GD-TSS training	0- 5	1.63	1.28

*N=24

The mean number of years of experience in group dynamics teaching was 4.13 and the mean years for other teaching was 8.96 years. As a group, the instructors were relatively experienced having taught on the average of 29.87 sessions of Group Dynamics-Traffic Safety School classes. The mean number of years since completing training in group dynamics teaching was just 1.63 years, with the stardard deviation being 1.28 years.

The values of the qualitative and quantitative variables which are directly related to the GD-TSS instructor certification requirements were used as guideline for the dichotomizing of the variables which will be used in a series of comparisons later in this section.

Averages of Interaction Variables

Average interaction variables were derived with a minor manipulation of the data on the verbal interaction variables from each of the twenty-four classes. These average interaction variables are presented in Table 4.3 and with the exception of the three average ratios, all of the findings are reported as average percentages and are based on an N of twenty-four. The first three averages are based on the primary divisions of the ten categories; namely, teacher talk, student talk, and silence or confusion. The percentage of teacher talk represents the average percentage of time spent in categories 1-7 (see Figure 4.1) and amounts to 49.80 percent. The percentage of student talk shows the average percentage of time spent in categories 8 and 9 and comprises 40.55 percent. The percentage of silence or confusion category shows the average percentage of time spent in category 10 and amounts to 9.65 percent of the interaction time.

The next seven interaction variables in Table 4.3, beginning with indirect influence percentage and ending with the extended student initiated talk percentage, represent areas that show extended activities of more than three seconds in duration. For example, the extended questioning percentage tells how much of the interaction time was spent by the instructor in extended questioning behavior beyond three seconds and the interaction variable percentage for direct influence indicates how much of the interaction time was spent by the instructor exerting extended direct influence measured by giving directions and criticizing or justifying authority beyond a three second time interval.

The following nine interaction variables, beginning with teacher accepts feelings percentage and ending with student initiates talk percentage are based on the total amount of interaction time spent in the teacher talk and the student talk categories, respectively. To illustrate, the average group dynamics instructor spent 63.06 percent of the time talking by lecturing.

The last three variables in Table 4.3, the indirect to direct statement or I/D ratio, the revised indirect to direct or revised I/D ratio and the indirect to direct response ratio, are not percentages; rather, these represent the ratios of data from the two sections of the average percent matrix. The indirect to direct statement ratio is a measure comparing the amount of indirect with the amount of direct teacher influence, including questioning and lecturing. It is generally felt that a teacher with I/D ratio of 1.00 or less can be classified as a direct teacher. The average I/D ratio in this section of the study was .61. Removing the effect of questioning and lecturing (leaving the most clearly indirect and direct categories) produces the revised I/D ratio. The average of the twenty-four instructors generated a revised I/D ratio of 14.26. This ratio was clearly skewed toward indirect influence rather than direct influence. The indirect to direct response ratio is a measure of teacher talk following student talk. The average based on twenty-four ratios for this study is 3.78 indicating a preponderance of indirect teacher reactions to participant talk.

Each of the taped group dynamics classes was ranked according to the degree of indirectness of directness of influence by the instructor. In Table 4.4 a comparison is made of class I/D ratios, statistically significant "t" test values and corresponding mean changes in knowledge. A graphical analysis of this information reveals some interesting relationships.

The most significant differences in knowledge seemed to occur at the extreme ends of the I/D ratio continuum, that is, the classes who had group dynamics instructors who were extremely indirect or extremely direct scored the highest in terms of knowledge change. While the true significance of these relationships can best be studied through

Table 4.3

Averages of Twenty-Two Selected Interaction Variables for Twenty-Four Instructors

Interaction Variables	N	Average
Percentage of teacher talk	24	49.80
Percentage of student talk	24	40.55
Percentage of silence or confusion	24	9.65
Indirect influence percentage	24	1.14
Extended acceptance percentage	24	.83
Extended questioning percentage	24	1.58
Extended lecturing percentage	24	29.23
Direct influence percentage	24	.54
Extended student response percentage	24	.72
Extended student initiated talk percentage	24	23.40
Teacher accepts feelings percentage	24	.72
Teacher praises/encourages percentage	24	3.30
Teacher uses student ideas percentage	24	10.14
Teacher asks questions percentage	24	20.20
Teacher lectures percentage	24	63.06
Teacher gives directions percentage	24	1.78
Teacher criticizes/justifies authority percentage	24	.91
Student response to teacher percentage	24	12.13
Student initiates talk percentage	24	83.13
Indirect to direct statement ratio	23	.61
Revised indirect to direct ratio	23	14.26
Indirect to direct response ratio	23	3.78

individual class interaction matrices, it is interesting to note that 11 classes exhibited significant changes in knowledge scores at the extreme ends of the indirect/direct continuum.

Table 4.4

Indirect to Direct Statement Ratio for Twenty-Four GD-TSS Classes Compared to Change in Knowledge With Significant "t" Values

Class No.	I/D Ratio	Mean Change in Knowledge			Significant "t" Values for Knowledge
#11	1.89	3.00		C	3.76[2]
#12	1.36	3.00	S	H	4.07[2]
# 1	1.11	4.07	I	A	4.59[2]
# 2	.96	4.28	G	N	5.94[2]
# 9	.96	3.30	N.	G	4.82[2]
#21	.84	2.26		E	3.90[2]
#10	.81	2.00			2.83[1]
#19	.71	.25			
# 3	.70	3.40			4.26[2]
#18	.67	2.38			2.78[1]
# 6	.61 Average	1.40			
#14	.58	2.20			
# 7	.57	1.63			
#17	.57	3.00			3.12[2]
# 8	.42	1.55			
#13	.40	2.57			3.84[2]
# 5	.29	3.53			5.18[2]
#20	.29	2.00			
#16	.26	1.28			
# 4	.21	2.23		C	3.42[2]
#22	.17	3.00	S	H	
#23	.13	3.42	I	A	4.69[2]
#15	.09	6.66	G	N	6.67[2]
#24	.00	4.92	N.	G	4.54[2]
				E	

[1] Statistically significant at the .01 level.

[2] Statistically significant at the .05 level.

In investigating the one-way analysis of variance results only one significant difference was found in the interaction patterns within classes whose participants achieved higher than average knowledge "gain scores" and those classes whose participants achieved lower than average knowledge "gain scores". The average indirect to direct response ratio in the less than mean group of participants was 4.15 while the same

Table 4.5

Comparison of GD-TSS Instructors Who Have/Have Not Taken Safety Courses on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	Taken Courses Group $\bar{x}$ N=19	Not Taken Courses Group $\bar{x}$ N=5	Sign. Level
Percentage of teacher talk	49.80	49.64	50.37	.812[a]
Percentage of student talk	40.55	(41.94)	35.50	.013[a]
Percentage of silence or confusion	9.65	8.41	(14.12)	.000[a]
Indirect influence percentage	1.14	(1.35)	.39	.000[a]
Extended acceptance percentage	.83	(.99)	.23	.000[a]
Extended questioning percentage	1.58	(1.80)	.80	.000[a]
Extended lecturing percentage	29.23	27.73	(34.68)	.032[a]
Direct influence percentage	.54	(.60)	.31	.038[a]
Extended student response percentage	.72	(.92)	.02	.000[a]
Extended student initiated talk percentage	24.42	24.84	22.85	.376[a]
Indirect to direct statement ratio	.61	(.66)	.51	.023[a]
Revised indirect to direct ratio	14.26	(16.98)	4.39	.000[a]
Indirect to direct response ratio	3.78	(4.33)	1.83	.000[a]

[a] Determined by F-ratio from two-group analysis of variance

( ) Indicates the higher value for the statistically significant comparisons

ratio for the over mean group was 3.42. The analysis of variance yielded an F-ratio of 4.622 and a significance level .032 for this comparison. Therefore, it can be concluded that instructors who use an indirect response to students generate lower cognitive achievement.

A comparison of participating group dynamics instructors who had taken courses in safety education with those who had not was made on the thirteen interaction variables and is shown in Table 4.5. Eleven of the differences shown in these comparisons were statistically significant at the .05 level. The average percentage for silence or confusion for the instructors who had not taken safety courses was 14.12 percent while in the group who had taken safety courses the mean was 8.41 percent. This group of instructors who had not taken safety courses also had a higher percentage of extended lecturing by instructors with 34.68 percent.

The group of instructors who had taken safety courses allowd a higher percentage of student talk (41.94 percent) in their classes. This group also had a higher percentage in categories of indirect influence, extended acceptance, extended questioning, direct influence, and extended student response. This group of instructors had a higher indirect to direct statement ratio value of .66, a higher revised indirect to direct of 16.98 and a higher response ratio value of 4.33 which points to the fact that instructors who have taken safety education courses tend to use more indirect statements within their classes, use an indirect approach to motivation and control, and use indirect responses to student talk.

Table 4.6 describes a series of comparisons of the interaction variables of participating group dynamics instructors who had completed eight or less safety credits with those who had completed nine or more credits in safety. Using comparisons on the thirteen selected interaction variables revealed a statistically significant difference on six of the comparisons. Teachers in the group with nine or more safety credits used much more extended indirect influence and acceptance of student ideas (1.79 percent compared to .94 percent and 1.45 percent compared to .64 percent). The group of instructors with more credits also spent 1.90 percent as compared to .94 percent and 1.45 percent compared to .64 percent). The group of instructors with more credits also spent 1.90 percent as compared to 1.48 percent of their time in extended questioning by the instructor. This group of six instructors also used more extended direct influence, .96 percent. Finally, this

Table 4.6

Comparison of GD-TSS Instructors by Safety Credits Taken on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	8 or Less Group $\bar{x}$ N=18	9 or More Group $\bar{x}$ N=6	Sign. Level
Percentage of teacher talk	49.80	50.59	47.24	.261[a]
Percentage of student talk	40.55	39.64	43.47	.127[a]
Percentage of silence or confusion	9.65	9.76	9.28	.713[a]
Indirect influence percentage	1.14	.94	(1.79)	.000[a]
Extended acceptance percentage	.83	.64	1.45	.000[a]
Extended questioning percentage	1.58	1.48	(1.90)	.018[a]
Extended lecturing percentage	29.23	30.56	24.96	.075[a]
Direct influence percentage	.54	.41	(.96)	.000[a]
Extended student response percentage	.72	(.91)	.13	.000[a]
Extended student initiated talk percentage	24.40	23.65	26.86	.141[a]
Indirect to direct statement ratio	.61	.57	(.79)	.000[a]
Revised indirect to direct ratio	14.26	16.25	7.83	.000[a]
Indirect to direct response ratio	3.78	3.67	4.15	.238[a]

[a] Determined by F-ratio from two-group analysis of variance

( ) Indicates the higher value for the statistically significant comparisons

group of instructors also exhibited a higher indirect to direct statement ratio of .79 as compared to .57 for the other group of instructors with less safety credits.

The second group of instructors who had eight or less credits in safety education had students who spent more time in extended talk in response to the instructor by a value of .91 percent as compared to .13 percent for the other students. Finally for this group of instructors, when the high percentage of teacher lecturing was removed and the revised indirect to direct ratio was figured for this group, they had a larger value of 16.25 as compared to 7.83 for the group of instructors with nine or more credits.

In Table 4.7 a comparison was made of group dynamics instructors who had taken twenty classroom hours in alcohol education with those who had not taken alcohol education hour-credits. For this group of comparisons, eighteen of the audio taped instructors had taken at least twenty hour-credits and six had not taken the twenty hour-credits. The division for these groupings was the minimum of twenty classroom hours of credit in alcohol education or alcohol study program as recognized by the National Council on Alcoholism, Wisconsin Department of Health and Social Service, or the Counselors Alliance. The teachers in the group that had not taken the twenty hour-credits showed a much higher percentage in teacher talk (58.15 percent as compared to 47.31 percent) and a larger percentage of time was spent in extended lecturing (39.23 percent as compared to 26.25 percent). Students in classes taught by these teachers who have not taken twenty hour-credits in alcohol education showed a small amount more of percentage of time spent in extended talk by student in response to instructor (1.13 percent as compared to .60 percent). When looking at the third ratio calculated between these two groups of teachers, this second group of instructors had a higher indirect ratio of responses to student talk 4.45 as compared to 3.59.

The other group of instructors who had taken at least twenty hour-credits in alcohol education had a higher tolerance for silence or confusion within their classes by a 10.67 percent as compared to 6.23 percent relationship. This group also had a higher percent of teacher use of extended indirect influence and extended acceptance of student ideas. The eighteen instructors in this group had students who responded with a higher percentage of extended student initiated talk.

Table 4.7

Comparison of GD-TSS Instructors by Credits in Alcohol Education on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	Taken 20 Credits Group $\bar{x}$ N=18	Not Taken 20 Credits Group $\bar{x}$ N=6	Sign. Level
Percentage of teacher talk	49.80	47.31	(58.15)	.000[a]
Percentage of student talk	40.55	42.01	35.62	.065[b]
Percentage of silence or confusion	9.65	(10.67)	6.23	.000[a]
Indirect influence percentage	1.14	(1.23)	.86	.010[a]
Extended acceptance percentage	.83	(.94)	.46	.000[a]
Extended questioning percentage	1.58	1.56	1.66	.578[a]
Extended lecturing percentage	29.23	26.25	(39.23)	.000[a]
Direct influence percentage	.54	.53	.56	.002[b]
Extended student response percentage	.72	.60	(1.13)	.003[a]
Extended student initiated talk percentage	24.40	(25.30)	21.42	.017[b]
Indirect to direct statement ratio	.61	(.71)	.36	.000[a]
Revised indirect to direct ratio	14.26	(15.74)	9.29	.002[a]
Indirect to direct response ratio	3.78	3.59	(4.45)	.033[a]

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[a] Determined by F-ratio from two-group analysis of variance

[b] Determined by Kruskal-Wallis analysis of variance by ranks H value

( ) Indicates the higher value for the statistically significant comparisons

This second group of instructors also had a higher indirect to direct statement ratio (.71 as compared to .36 for the second group) and a higher revised indirect to direct ratio of 15.74 as compared to 9.29.

Table 4.8

Comparison of GD-TSS Instructors by Years of Teaching GD-TSS on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	4 and Under Group $\bar{x}$ N=13	5 or More Group $\bar{x}$ N=11	Sign. Level
Percentage of teacher talk	49.80	44.82	(55.74)	.000[a]
Percentage of student talk	40.55	(43.65)	36.84	.001[b]
Percentage of silence or confusion	9.65	(11.53)	7.40	.002[b]
Indirect influence percentage	1.14	1.19	1.09	.435[a]
Extended acceptance percentage	.83	.90	.75	.166[a]
Extended questioning percentage	1.58	(2.05)	1.02	.000[a]
Extended lecturing percentage	29.23	22.27	(37.54)	.000[a]
Direct influence percentage	.54	.54	.54	.963[a]
Extended student response percentage	.72	(.96)	.43	.005[a]
Extended student initiated talk percentage	24.4	(26.92)	21.42	.003[a]
Indirect to direct statement ratio	.61	(.78)	.44	.000[a]
Revised indirect to direct ratio	14.26	12.18	(16.73)	.009[a]
Indirect to direct response ratio	3.78	4.06	3.46	.227[b]

[a] Determined by F-ratio from two-group analysis of variance

[b] Determined by Kruskal-Wallis analysis of variance by ranks H value

(   ) Indicates the higher value for the statistically significant comparisons

Table 4.8 enumerates a comparison between groups of instructors who had taught group dynamics classes less than four years and those who had taught five or more years. There were thirteen group dynamics instructors in the former group and eleven instructors in the latter. The findings report nine of the comparisons were statistically significant at the .05 level. It was found that the more experienced instructor had a tendency to talk more in his/her classes with a percentage of 55.74 as compared to 44.82 for the group of instructors with less than four years of teaching experience. The group of experienced instructors also had a tendency to use extended periods of lecturing with a difference of 37.54 percent as compared to 22.27 percent. In comparing the revised indirect to direct ratio, which is content free, this group of more experienced instructors had a higher ratio by the value of 16.73 as compared to 12.18 for the inexperienced instructors.

The inexperienced instructors with four or under years of group dynamics teaching had a higher percentage of student talk (43.65 percent) and percentage of silence or confusion (11.53 percent). The group of inexperienced instructors also had a slight advantage in amount of time spent in extended questioning. Students in the classes of inexperienced instructors spent more time in extended response to the instructor with a value of .96 percent. This was also followed by the fact that these students spent an extended amount of time in student initiated talk with an advantage of 26.92 percent as compared to 21.42 percent. The indirect to direct statement ratio for this group of inexperienced teachers was .78 as compared to .44 for the group of experienced instructors.

A comparison of eleven group dynamics instructors who had completed fifteen or less creditsin curriculum development with thirteen instructors who had completed sixteen or more credits, using the selected interaction variables is presented in Table 4.9. Eight of these comparisons were statistically significant at the .05 level. Of special note is the fact that instructors with less credits in curriculum development had a tendancy to talk more within their classes with value of 52.82 percent as compared to 47.37 percent for the instructors with more credit in curriculum development. This is also indicated by the fact that these instructors spent more time in extended lecturing with a percentage of 35.16 as compared to 24.46 percent. When

Table 4.9

Comparison of GD-TSS Instructors by Semester Hours of Curriculum Development on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	15 or Less Group $\bar{x}$ N=11	16 More Group $\bar{x}$ N=13	Sign. Level
Percentage of teacher talk	49.80	(52.82)	47.37	.032^a
Percentage of student talk	40.55	41.39	39.87	.481^a
Percentage of silence or confusion	9.65	5.79	(12.75)	.000^a
Indirect influence percentage	1.14	1.11	1.17	.665^a
Extended acceptance percentage	.83	.73	.91	.112^a
Extended questioning percentage	1.58	1.57	1.59	.886^a
Extended lecturing percentage	29.23	(35.16)	24.46	.000^a
Direct influence percentage	.54	.11	(.89)	.000^a
Extended student response percentage	.72	.54	(.87)	.030^a
Extended student initiated talk percentage	24.40	(28.42)	21.18	.000^a
Indirect to direct statement ratio	.61	.548	(.69)	.007^a
Revised indirect to direct ratio	14.26	(20.49)	9.25	.000^a
Indirect to direct response ratio	3.78	3.56	3.96	.146^b

[a] Determined by F-ratio from two-group analysis of variance

[b] Determined by Kruskal-Wallis analysis of variance by ranks H value

( ) Indicates the higher value for the statistically significant comparisons

removing this high percentage of teacher lecturing for the calculation of revised indirect to direct ratio, this group of instructors had a higher ratio by a value of 20.49 as compared to 9.25 thus indicating a higher level of indirect motivation or control within the classes of instructors with less credits.

The instructors with more credits in curriculum development had a higher percentage of silence or confusion within their classes as indicated by a 12.75 percent value as compared to a 5.79 percent. This group of instructors had a higher percentage of extended direct influence. The second group of thirteen instructors also had students with a higher amount of short answer responses (.87 percent as compared to .54 percent). In the calculation of indirect to direct statement ratio the latter group had a higher value by a comparison of .69 to a value of .548.

In an attempt to determine if there were any difference in interaction variable averages of groups of instructors who had attended group dynamics workshops as opposed to those who had not, Table 4.10 shows a set of comparisons for twenty-two instructors who had attended workshops with those who had not. The groups of instructors who did not attend group dynamics workshops had a higher percentage of student talk within their classes by a value of 52.35 percent as compared to 39.50 percent. A percentage value of 33.63 percent, which indicates the amount of extended student initiated talk, was also high in favor of instructors who had not attended workshops.

Instructors who had attended group dynamics workshops showed a higher percentage of teacher talk within their classes by a value of 50.96 percent as compared to 36.61 percent. A considerble amount of this talk (30.11 percent) was in the extended lecturing. This group of instructors who attended workshops also had high values in the use of extended indirect influence and extended acceptance of student ideas. This group of instructors also had a higher percentage in direct influence. Students within this group of instructors' classes responsed more director to teacher questions by a relationship of .78 percent to .03 percent. In considering the ratios, the instructors within this group had a higher indirect to direct statement ratio of .64 as compared to .44 and a higher indirect to direct ratio for responses to students by a value of 3.99 as compared to 1.43 for the other group of instructors who had not attended group dynamics workshops.

Table 4.10

Comparison of GD-TSS Instructors by Attendance at Group Dynamics Workshops on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	Attended Workshops Group $\bar{x}$ N=22	Not Attended Workshops Group $\bar{x}$ N=2	Sign. Level
Percentage of teacher talk	49.80	(50.96)	36.61	.002[a]
Percentage of student talk	40.55	39.50	(52.35)	.000[a]
Percentage of silence or confusion	9.65	9.52	11.03	.457[a]
Indirect influence percentage	1.14	(1.20)	.45	.000[a]
Extended acceptance percentage	.83	(.88)	.28	.002[a]
Extended questioning percentage	1.58	1.61	1.23	.157[a]
Extended lecturing percentage	29.23	(30.11)	19.27	.027[a]
Direct influence percentage	.54	(.58)	.06	.016[a]
Extended student response percentage	.72	(.78)	.03	.006[a]
Extended student initiated talk percentage	24.40	23.59	(33.63)	.003[a]
Indirect to direct statement ratio	.61	(.64)	.44	.034[a]
Revised indirect to direct ratio	14.26	14.53	11.14	.294[a]
Indirect to direct response ratio	3.78	(3.99)	1.43	.000[a]

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[a] Determined by F-ratio from two-group analysis of variance

( ) Indicates the higher value for the statistically significant comparisons

Table 4.11 presents a comparison between group dynamics instructors with one or less years since completing formal training in group dynamics and instructors with two or more years since completing

Table 4.11

Comparison of GD-TSS Instructors by Years Since GD-TSS Training on Thirteen Interaction Variables

Percentage/Ratio Interaction Variable	Grand Mean N=24	1 or Less Group $\bar{x}$ N=15	2 or More Group $\bar{x}$ N=9	Sign. Level
Percentage of teacher talk	49.80	47.94	52.96	.055[a]
Percentage of student talk	40.55	40.92	39.92	.650[a]
Percentage of silence or confusion	9.65	(11.14)	7.13	.000[a]
Indirect influence percentage	1.14	(1.24)	.97	.032[a]
Extended acceptance percentage	.83	.91	.70	.052[a]
Extended questioning percentage	1.58	1.45	(1.81)	.019[a]
Extended lecturing percentage	29.23	27.17	(32.72)	.045[a]
Direct influence percentage	.54	(.65)	.35	.012[a]
Extended student response percentage	.72	.62	.90	.132[b]
Extended student initiated talk percentage	24.40	24.57	24.14	.867[b]
Indirect to direct statement ratio	.61	.55	(.76)	.000[a]
Revised indirect to direct ratio	14.26	11.[illegible]6	(18.66)	.000[a]
Indirect to direct response ratio	3.78	3.04	(5.05)	.000[a]

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[a] Determined by F-ratio from two-group analysis of variance

[b] Determined by Kruskal-Wallis analysis of variance by ranks H value

( ) Indicates the higher value for the statistically significant comparisons

training in group dynamics. Eight of the thirteen interaction comparisons were found to be statistically significant at the .05 level. From the inventory of teacher characteristics, it was found that fifteen of the instructors had received formal training within the last year, while nine of the instructors had received training two or more years from the time that the tapes were prepared for this section of the study. Teachers who had received training within the year had a higher tolerance for silence of confusion within their class by a comparison of 11.14 percent to 7.13 percent for the group with training two or more years prior to the time of taping. This group also showed a slight tendency toward the use of extended indirect influence (1.24 percent compared to .97). In viewing the indices for determining the direct influence, it is found that the instructors with one or less years since training had a higher percent of direct influence by a value of .65 percent as compared to .35 percent for instructors receiving training more tan two years ago.

Teachers who had completed training more than two years ago showed slightly higher values in extended questioning percentage with a value of 1.81 percent as compared to 1.45 percent and the extended lecturing category with a value of 32.72 percent. The ratios for this latter group were all higher with a value of .76 for the indirect to direct statement ratio, 18.66 percent for the revised indirec to direct ratio and 5.05 percent for the indirect to direct response ratio.

DISCUSSION

The findings presented in this chapter are fairly straightforward and the conclusions that flow from them are generally obvious. The understandings derived from this part of the Evaluation Study are clearly reflected in the last chapter which sets out recommendations.

CHAPTER FIVE

The Instructor Psychosocial Behaviors and Student Adaptive Behaviors

STATEMENT OF THE EVALUATION QUESTION

The analysis undertaken in this section of the Evaluation Study examines: 1) instructor verbal behavior; 2) student verbal behavior; 3) the interrelationship between instructor verbal behavior and student verbal behavior.

The instructor's influence on the student's perceptions of acceptance and support is the basis for studying instructor verbal behavior. The student must feel accepted, supported and not threatened in order for meaningful and useful learning to occur. An instructor's verbal behavior contributes significantly to the student's perceptions of acceptance and support, or unacceptance and threat. When a student has the perception of being accepted and supported he/she is more willing to examine and consider the possibility of changing his/her attitudes and behaviors. This is an indication of individual growth. Behaviors characteristic of growth are typified by such attributes as openness and an ability to deal with such problems as their drinking habits. Student perceptions of unacceptance and threat will result in defensive behavior. In defensive behavior present attitudes and behaviors are maintained rather than examined or changed. Defensive behavior is characterized by such attributes as inflexibility and illogical thinking. Student perceptions of acceptance and support, or unacceptance and threat are communicated through their verbal behavior. Therefore, student verbal behavior reflects the quality of the student's educational experience. This is the basis for studying student verbal behavior.

Instructor verbal behavior and student verbal behavior cannot be meaningfuly examined independently. These two variables are closely interrelated. An analysis of this interrelationship should reveal patterns of association between the variables. This is the basis for the third part of this analysis presented in this section.

The analysis discussed in this chapter employs a theoretical framework and it does so for three reasons: 1) a framework provides a solid theoretical basis for proposing evaluation questions regarding instruction; 2) the framework provides criteria by which the results from an investigation of the evaluation question may be judged; 3) the framework helps to define programs of action if they are determined to be necessary.

This analysis uses the theoretical frameworks of Erikson and Kroeber-Haan because they provide a solid theoretical basis for examining instructor and student behaviors, and the interrelationship between them. Instructor verbal behavior will be examined according to Erikson's framework of psychosocial development (Erikson, 1950). Student verbal behavior will be examined according to the framework of ego mechanisms set forth by Haan (1963) and Kroeber (1963).

To appreciate why Erikson's framework was used to examine instructor verbal behavior it is necessary to understand the two dimensions of instructor verbal behavior. These are the cognitive and the psychosocial dimensions. It is the psychosocial dimension through which the instructor communicates acceptance and support, or nonacceptance and threat. Therefore, this study is concerned with the psychosocial dimension of instructor verbal behavior. Erikson's framework of psychosocial development provides specifications for reliably identifying the positive and negative characteristics of the psychosocial dimension of instructor verbal behavior.

Employment of these two frameworks to examine instructor and student verbal behaviors provides the means to examine three evaluation questions:

1) What percent of the instructor's psychosocial verbal behavior is characterized as psychosocial?
2) What percent of the student's verbal behavior is characterized as coping and as defensive behavior?
3) What association exists between instructor psychosocial verbal behavior which is positive and student coping behavior which is positive and student coping behavior in the 10 GD-TSS sessions examined?

RATIONALE

The analysis presented in this chapter is based on the fact that in the teaching - learning process the emotional impact of the instructor's behavior significantly influences the quality of an individual's educational experience within the classroom. This influence is reflected in the student's classroom behavior (Withall & Lewis, 1963, pp. 696-714). It is assumed that the emotional quality of the instructor's behavior is revealed in an analysis of his psychosocial behavior. The impact of the instructor's behavior is demonstrated in an analysis of student coping and defensive behaviors.

The study reported in this chapter was based on certain assumptions which will be examined in the material which follows.

The assumption was made that instructor verbal behavior can only be fully understood when it is viewed in two dimensions or two broad functions. These are the cognitive function and the psychosocial function. This method for viewing instructor verbal behavior is based on a well established research tradition which has consistently interpreted behavior in terms of its cognitive and affective components. This perspective recognizes that during the course of dealing with certain aspects of one's environment in a reflective and rational manner, an individual may also develop strong emotional reactions toward him/herself or some element of his/her environment. The affective component of behavior provides a way for interpreting and describing the feelings and attitudes expressed in the emotional reaction.

In this study the notion of affective behavior has been replaced with the term psychosocial concern. The terms are somewhat similar but the use of the term psychosocial concern allows more precision in understanding and describing behavior. Psychosocial refers to those concerns in which an individual readily perceives direct emotional involvement of some aspect of him/her self in a relationship with some aspect of his/her world. These concerns are often reflected, for example, in the extent to which individuals are willing to voice their ideas and feelings, to assume responsibility for their actions, to undertake new or different experiences, or the extent to which individuals are satisfied and competent in their work. The use of the term psychosocial recognizes that these concerns may be evident in behavior in which there is little expression of affect. Therefore, the behavior in which there is little expression of affect. Therefore, the term offers a more complete understanding of human behavior than does the term affective behavior. In addition, the term psychosocial is lodged in a theoretical framework which provides clear and explicit specifications for identifying psychosocial concerns within an individual's behavior.

In the cognitive function the instructor is facilitating student processing of factual information at some level, varying from acts of simple memory to making sense of seemingly divergent aspects of one's experiences. The instructor operating at the cognitive level assists the student to differentiate and structure the information present in the subject matter.

The processing of factual information is often associated with emotional involvement of the student with some aspect of what is being worked through. It is in being attentive and concerned with these feelings and attitudes that the instructor serves a psychosocial function as well. For example, a student may state, "Last week you said that four drinks within one hour would put me over the legal limit. But I know what I feel like after four drinks, and I know I'm not drunk!" The instructor is presented with behavior at two levels. The student's behavior reflects misconceptions over the facts surrounding "intoxication" and "being drunk." His statement also reflects strong feelings about the information. The instructor must positively and constructively attend to both levels of the student's behavior in order to provide a meaningful educational experience for the student.

The study recognized a second assumption that an instructor's verbal behavior has a significant effect on student learning. Furthermore instructor verbal behavior which is psychosocially positive assists in student learning, and conversely instructor verbal behavior which is psychosocially negative impedes student learning.

Instructor verbal behavior has been shown to be the single most important influence on the quality of the emotional conditions of the classroom, and these conditions have a notable influence on learning. Conditions of acceptance and support, and where threat is minimized have the greatest effect on enhancing meaningful and useful learning.

classroom learning (Withall & Lewis, pp. 696-714), 1963).

The research literature concerned with instructor classroom behavior has shown that certain instructor behaviors are associated with higher creativity, more problem-solving, more work performed, higher achievement, the presence of emotional integration and minimal student anxiety (Soars, 1963; Cogan, 1958; Rosenshine, 1971; Rogers 1969, 1951; Thelen, et. al. 1951; Withall, 1949). These behaviors have been described as showing warmth, understanding, acceptance and encouragement of student ideas and feelings within the limits of the classroom. These types of instructors put the student first, the problem second, and the instructor third. They seek to promote creative thinking and growth of the individual.

The studies cited above suggest that certain instructor behaviors are associated with student withdrawal and unwillingness to share ideas and feelings, apathy toward solving the problems faced, aggressiveness, hostility, reduced achievement (Dunham and Biddle 1974; Rosenshine, 1971) and substantially higher levels of student anxiety. These instructor behaviors have been described as criticizing, disapproving and withholding warmth. The student behaviors described above are often associated with teachers who do most of the talking, directing, explaining, goal setting and evaluating. They put the instructor first, the problem second and the student third.

Research on instructor classroom behavior clearly indicates that certain instructor behaviors are much more conducive than other instructor behaviors to meaningful and significant student learning. One problem with this research is the lack of precise, carefully formulated definitions for the concepts used to describe instructor behavior. For example, what is meant by warmth, acceptance, support or criticism and disapproval is not carefully delineated. It is difficult to determine if researchers are referring to similar instructor behaviors when these terms are used to describe instructors. It is apparent that this limitation of the research described above is due to the absence of a framework. A central framework would force researchers to describe instructor behaviors in terms which are precisely and carefully specified.

The framework of psychosocial development proposed by Erik Erikson

(1950) and organized for research purposes by Boyd (1961) provides clear, careful and precise specifications for describing instructor verbal behavior in terms of well formulated concepts. Through the use of this framework it is possible to identify behaviors as positive or negative within the psychosocial framework. For an example, an instructor who welcomes and encourages student expressions of ideas and feelings, allows students to take responsibility for class work and discussion, and provides opportunities for students to plan their programs, is demonstrating psychosocially positive behavior. Other instructor behaviors can be described as psychosocially negative. An instructor who dominates group discussion, is critical of student ideas and disapproving of feelings expressed, who makes most of the decisions for the students and who plans and directs the class as he sees fit is demonstrating psychosicially negative behavior.

The description of instructor behavior as psychosicially positive or negative conveys interpretations similar to much of the previous rsearch in this area. Descriptions of instructor behavior found to result in favorable classroom conditions and to enhance learning are similar to descriptions of psychosocially positive behavior. Descriptions of instructor behavior associated with unfavorable classroom conditions and reduced learning are similar to descriptions of psychosicially negative behavior. The framework provides the important advantage, however, of clear, precise and well formulated specifications with which to describe and interpret instructor behaviors.

A third assumption was made, namely, students may become emotionally involved in some aspect of a conflict or problem confronting the group. Students resolve the situation for themselves with either coping behavior or defensive behavior. These two types of behavior can be readily identified and described.

There is considerable evidence in the literature to support this assumption (Haan, 1977). It has been known for some time that an individual may respond to perceived emotional conflict in one of two ways. Haan (1963) and Kroeber (1963) independently proposed a framework for viewing these responses. Their framework (referred to as the Kroeber-Haan framework of ego functioning) treats these two types of human behavior as separate processes within the personaity. They consider human adaption to emotional conflicts and problems in two dimensions: coping and defensive. In seeking adaptation to an emotional conflict or problem through coping the individual perceives the conflict or problem with a flexibility and a willingness to entertain all the aspects of the situation. He/she demonstrates a willingness to examine and to consider the possibility of changing his/her attitudes and behaviors in order to obtain a meaningful and constructive resolution. The individual sees the necessity of rational, logical thought and is able to readily choose from alternatives without an over reliance on past behaviors or situations. He/she is quick to identify fantasy and dishonesty in him/herself or in others. An individual who copes demonstrates a willingness to make the best out of a situation which is not optimal. Experiences of this nature lead to change in behavior and personal growth.

An individual may adapt to a perceived emotional problem by engaging in defensive behavior. In defensive behavior an individual seeks a solution to the conflict by maintaining present attitudes and behaviors. Alternatives are not considered in a rational and logical way. Choice is made primarily with a reliance on past behaviors and past situations with little regard for the concrete realities of the present situation. Individuals engaged in defensive behavior demonstrate inflexibility and an unwillingness to change. There is little chance that these types of experiences contribute to individual growth.

The educational setting of the GD-TSS classroom presents students with a variety of different conflicts and problems. These conflicts may involve 1) the student's relationship with the instructor or 2) other group members; 3) difficulty in understanding the subject matter; or 4) a poor sense of self-esteem. The student will react to these perceived conflicts by either coping or defending. The student can only derive a meaningful and growth enhancing experience through coping with the perceived conflict. Defensive behavior will tend to impede behavioral change and growth.

It would follow from the discussion above that the study made the assumption that coping behavior is more conducive to significant and meaningful learning than is defensive behavior.

It is necessary to explain what is meant by "significant and meaningful learning." Important to meaningful and significant learning is the concept of differentiation. Differentiation is the process of distinguishing discrete parts of a situation, and how these parts are related to each other and to the whole. The concept of differentiation can be illustrated in the class activity of the GD-TSS program where the instructor asks the students to describe the 12 hours preceding their arrest. The 12 hours represent the whole. From it the student must differentiate various aspects of the experience, and determine their relationship to the OWI arrest and the importance they hold for the meaning of his/her present experiences. Differentiation involves active examination by the student of his/her experiences. This examination is motivated by a desire to achieve his/her own purposes. Thus differentiation is essential to purposive learning (Snygg and Combs, 1957).

The process of differentiation requires flexible and purposive thought. To adequately differentiate the aspects of one's personal experiences and to draw meaning from them, the individual must take into account the reality requirements of the present situation. The learner must deal with the disturbing aspects in a logical manner in order to differentiate those things which are pertinent to the solution of the problem. The process of differentiation is, in short, a process of coping. Defensive behavior detracts from one's ability to differentiate. Therefore, defensive behavior is not conducive to significant and meaningful learning.

METHODOLOGY--INSTRUCTOR PSYCHOSOCIAL BEHAVIOR

The purpose of the methodology is to provide the basis for identifying and describing instructor verbal behavior as psychosocially positive or psychosocially negative.

Specifications of Variables

The methodology is based on the theoretical framework of psychosocial development proposed by Erikson (1950) and adapted for purposes of research by Boyd (1961). The methodology makes use of several terms from this framework. These terms are specified in this section.

Psychosocial and Nonpsychosocial -- The evaluation question calls for identifying instructor psychosocial verbal behavior and, therefore, it is necessary to distinguish instructor verbal behavior which is psychosocial from that which is nonpsychosocial. A psychosocial statement reflects evidence that there is an aspect of the individual's personality involved in a relationship with some aspect of the world or life conditions in which the individual functions. These statements often reflect how the individual feels about the relationship that he/she perceives at that moment. A nonpsychosocial statement does not reflect evidence of involvement of an aspect of the individual's personality in a relationship with some aspect of the world or life conditions in which the individual functions. There is little, if any indication, of how the individual feels at that time about various aspects of his/her world. For example, the class is discussing the role of legislation in dealing with drinking and driving. The instructor says, "There are too many judges willing to let off people with money!" The instructor is clearly communicating the extent to which he feels the judicial branch of government is doing its job. This statement is psychosocial. Another instructor may say in response to a student's question. "There were five corporate executives arrested for OWI last year. Four of them were sentenced to the GD-TSS program." If this were said matter-of-factly the statement would provide little evidence as to how the instructor thinks or feels about this situation. It is, therefore, a nonpsychosocial statement.

An instructor may make three different types of psychosocial statements: 1) the statement may reflect how the instructor feels about some aspect of the world in which he perceives personal involvement ("I think our program has a lot to offer people who really want to change their drinking and driving behavior.") 2) the statement may reflect the perceived feelings of others ("You seem to be really angry about it.") or it may project judgements unto others ("You ought to feel guilty for what you've done.") 3) The statement may help or hinder the group in dealing with an emotional issue or problem ("Does anyone else feel like Jim is feeling about being arrested?")

Distinction Between Positive and Negative Psychosocial Statements--It is necessary to identify instructor psychosocial statements as positive or negative. Positive psychosocial statements are seen to enhance the development of one's self-concept ("People who have come through this program in the past have led me to believe that people are capable of changing their drinking habits.") Negative psychosocial statements tend to obstruct the development of one's self-concept. ("Most people don't change from being here. I don't think they're interested in or capable of changing.") The basis for making this distinction is provided in Erikson's description of the eight stages of psychosocial development (1950). In this description Erikson specifies the conditions of positive and negative stage resolutions. These specifications have been adapted for research purposes (Boyd 1961). The adaptation allows the use of Erikson's specifications for describing and interpreting verbal behavior.

Coding Procedures

Instructor psychosocial verbal behavior was identified and described by the process of coding instructor psychosocial utterances within a single group session for each of the 10 groups. An instructor psychosocial utterance was defined as the smallest unit of verbal behavior which clearly reflected psychosocial content and which was codable into one of the eight stages of Erikson's framework of psychosocial development. An utterance could consist of a single word, phrase, fragment or sentence ("Good!"; "You are here, that's what counts."; "I think all of you can change your habits.") A separate utterance was indicated by 1) a silence of five seconds or longer between comments from the same person; 2) a change in the person who is speaking; 3) a change in codable content of the comments. For example, in the statement, "I think it's possible, but I doubt it." the first part of the statement indicates Trust - Stage one positive. The second part indicates Mistrust - Stage one negative. The sentence is coded as two separate utterances. Interruptions in group interaction were not coded. These interruptions consisted of 1) viewing films; 2) writing in-class assignments; 3) breaking into subgroups; 4) taking a break, and 4) ending of the session.

Individual judges were used to code the group sessions for instructor psychosocial utterances. The judges were instructed to listen carefully to tape recordings of the group sessions. Each group was listened to for about 10 minutes in order to get a "feel" for the nature of the group interaction. The tape was rewound and coding was initiated with the beginning of the group session. The judges listened to the instructor verbal behavior and recorded utterances reflecting psychosocial content on the Coding Form for Instructor Psychosocial Utterances. The utterance was recorded verbatim. The judge using the specifications of the framework coded the utterance into the ego stage. The specifications of positive and negative resolution of that stage were then used to determine if the utterance was psychosocially positive or negative. The valence (i.e. positive or negative) was recorded on the coding form. Coding proceeded in this manner using the same form to the end of the session. The time of the duration of the session was recorded on the form. The judges resumed coding of the next assigned session using a new coding form marked with the group code number and session number.

An example of the coding procedure would be as follows: The instructor says, "The class will meet for seven consecutive weeks. Absolutely no allowances will be made for absences. If you're absent you start the class all over." The first sentence is nonpsychosocial and is not recorded. The second sentence represents a separate psychosocial utterance. The utterance is, therefore, recorded. The utterance reflects Ego-stage two - Autonomy vs. Shame and Doubt. The specifications for this stage clearly indicate that the utterance is psychosocially negative. The valence is recorded next to the utterance. The third sentence also represents a separate psychosocial utterance. It is recorded, the ego stage determined, and the valence recorded based on the specifications of that ego stage. The utterance also reflects ego stage two and is psychosocially negative.

Tallying Procedure

Each of the 10 group sessions selected for analysis were coded for instructor utterances reflecting psychosocially positive behavior and psychosocially negative behavior. The number of utterances in each category were totalled, and then added together to obtain a total of all instructor psychosocial utterances coded. This total, the totals for positive and negative psychosocial utterances and the duration in minutes of the session were recorded in table form with the corresponding group code number (Table 5.1).

Training of the Judges

The coding of instructor psychosocial utterances requires extensive training in the application of the specifications of Erikson's psychosocial framework to verbal behavior. The following training procedure was established to enable judges to become competent in coding instructor verbal behavior according to this framework.

Judges were instructed to study Erikson's framework and to identify specifications from the text for each of the eight ego stages. They were then required to list from memory five positive specifications and five negative specifications for each of the eight ego stages.

Following successful demonstration of competency in identifying the framework's specifications the judges were asked to apply these specifications in the coding of 160 statements which represented the eight ego stages. They were asked to code the statement for the ego stage and valence represented. Their responses were compared to an answer key for accuracy.

When sufficient competency was demonstrated in recognizing the ego stage and valence of written statements the judges were instructed to record and code all psychosocial utterances made by the subject in an audio-tape recorded interview. Training continued at this step until sufficient competency in coding the subject responses was obtained.

The judges were instructed to record and code all psychosocial utterances for the selected sections provided in an audio-taped group discussion. Training continued at this step until sufficient competency in coding instructor utterances was obtained.

The final step in training the judges was to perform an inter-coder reliability test utilizing instructional periods from two different groups. The result of this reliability test was 0.91 for recognition of psychosocial utterance and 0.72 for recognition of ego stage and valence. These results reflect an acceptable level of reliability. The judges were then instructed to begin coding the GD-TSS sessions selected for this analysis.

METHODOLOGY--STUDENT COPING AND DEFENSIVE BEHAVIORS

The methodology employed in this part of the Evaluation Study provided the means by which to identify student verbal behavior as 1) coping, 2) defensive, or 3) conflict-free behavior.

Specifications of Variables

The methodology used to identify student verbal behavior as coping or defensive is based on the Kroeber-Haan framework of ego functioning. The methodology makes use of several terms which are specified in this section.

Conflict-free and Conflict-evident -- The identification of student coping and defensive behavior requires that a distinction be made between behavior which clearly reflects involvement of an individual's personality in some way, and behavior which reflects primarily the student's role expectations and obligations. Student behavior which clearly reflects involvement of the individual's personality with some aspect of the situation at hand is referred to as conflict-evident behavior. Conflict-evident verbal behavior is usually associated with clear indications of emotionality, or feelings about what was said. The statement also reflects a particular psychosocial concern. Evidence of particular feelings, psychosocial concerns or of emotionality in verbal behavior indicates that some aspect of the situation at hand produces psychological conflict for the individual. The individual will respond to this conflict by either coping or defending.

Conflict-free behavior describes student behavior which arises primarily from his/her sense of the expectations or obligations of the role he/she is presently playing. The behavior is viewed as responding to the reality requirements of the situation, but there is no evidence that the individual behavior reflects psychological conflict. Conflict-free behavior is characterized by a lack of firm evidence of feelings, emotionality, or particular psychosocial concerns. Therefore, there is little evidence to indicate that the student is engaged in either coping little evidence to indicate that the student is engaged in either coping or defensive behaviors.

A few examples will serve to make this distinction clearer. A student is reporting on his 12 hours prior to his OWI arrest: "It's hard for me to even think about that time! It happened so fast! It all seems a blur, I don't remember much about it." The statements reflect emotionality and feelings. The student also conveys the sense that he was not really in control of himself during these 12 hours. This is an indication of a psychosocial concern of Autonomy verses Shame and Doubt.

Another student states: "I was out for the evening with the bridge club. We were at the bowling alley until about one o'clock. We were drinking steady but not heavy. I was offered a ride but I decided to drive myself. I was stopped for weaving about a half mile from my house." This student has provided a historical account of what happened to her the 12 hours before her arrest. There is no evidence that emotionality or feelings are associated with what is said, and no indications of any psychosocial concerns. This statement reflects what is referred to as conflict-free behavior.

The use of the terms conflict-evident and conflict-free assumes that psychological conflict will be evident in verbal behavior. It is possible that a student may respond to a situation in a matter-of-fact way, with no indication of some conflict which may be present. It is assumed, however, that if the situation creates psychological conflict for the individual it will be manifest in verbal behavior at some point. It is therefore reasonable to use the present distinction as a means for identifying coping or defensive behavior.

Coping -- The specifications for coping behavior are provided by the Kroeber-Haan framework and are listed below. An individual demonstrating coping:

1. appears to be involved in choosing and reflects flexible, purposive behavior.
2. is pulled toward the future and takes account of the needs of the present.
3. is oriented to the reality requirements of the present situation.
4. reflects differentiated process thinking that integrates conscious and preconscious elements.

6. allows for various forms of affective satisfaction in open, ordered and tempered ways.

The coping process is illustrated in the following statement.

> I was angry at the cops when I was arrested, but I realize now that I'm really angry at myself for doing what I did, and not at the cops at all.

The statement reflects behavior indicative of specifications 4 and 6 indicating the student is able to differentiate the various aspects of his/her experience. There is the presence of reflective thought, and the ability to entertain certain disturbing aspects.

Defensive -- The specifications for defensive behavior are provided in the Kroeber-Haan framework and are listed below. An individual demonstrating defensive behavior:

1. turns away from choice and is therefore rigid and channeled.
2. is pushed from the past.
3. distorts aspects of present requirements.
4. reflects undifferentiated thinking and includes elements that do not seem part of the situation.
5. operates with the assumption that it is possible to magically remove disturbing feelings.
6. allows gratification of impulses in concealed or evasive ways.

A defensive process is illustrated in the following statement.

> I've always been able to drive home after parties.
> This arrest was just a stroke of bad luck.

Specifications 1, 2, 4, and 5 are applicable to this statement. The individual does not wish to consider alternative explanations for what has happened. He/she relies on past experiences to deal with a present conflict, shows little differentiated or reflective thought and wishes to remove the disturbing situation with the explanation of "bad luck."

It is not necessary in using the specifications listed above to identify the single most predominant or relevant specification for the behavior in question. As a corallary it is not necessary that all six specifications be applicable to any one utterance. One, several, or all of the specifiations may be used for the coding of an utterance as coping or defensive.

Coding Procedures

Student coping and defensive behavior was identified and described by the process of coding student utterances within the time frame of one group session. A student utterance was defined as a single word, a phrase or a complete sentence or any combination of these three in a series. A separate utterance was indicated by a 1) change in the individual who was speaking; 2) a silence of five seconds or longer between what is being said by the same person, 3) a change in the conteht of what was said, indicating a change in the coding. For example, an individual says, "No, I didn't have anything to do with my arrest!" Well, to some extent I did." The first sentence reflcts a refusal to consider his/her own responsibilities in what happened. This is a rigid, inflexible position and clearly defensive. The second sentence suggests a willingness to reconsider the matter, to reflect and perhaps sort out his/her experience in a meaningful and helpful way. This is indicative of coping behavior and demonstrates a change in the coded content of what was said. The two sentences are, therefore, separate utterances.

Student utterances were coded during instructor-student or student-student interactions for a complete session for each of the 10 groups. Coding was not performed when the following activities were taking place: 1) viewing a film; 2) working on in-class assignments; 3) listening to a guest speaker or 4) working in subgroups.

Individual judges were used to code student verbal behavior for each of the 10 group sessions. The judges were instructed to listen carefully to audio tape recordings of the group sessions assigned. The recording of each group was listened to for about 10 minutes in order to get a "feel" for the nature of the group interaction. The tape was rewound and coding began with the beginning of the group session. The judges recoded every student utterance on the Coding Form for Student Verbal Behavior. The utterance was recorded in a fashion which would allow precise identification of identical statements when performing an inter-coder reliability test. This involved recording the first several words of an utterance. The utterance was then interpreted as reflecting either conflict-free or conflict-evident behavior. Behavior interpreted as conflict free was coded as "No Evidence" indicating that no firm sense of psychological conflict is involved. Behavior interpreted as conflit-evident indicates a firm sense that psychological conflict was present and was coded as either coping or defensive based on the specifications discussed previously. Coding proceeded in this manner to the end of the group session.

An example of the coding procedure would be as follows:

> Student 1: I was arrested once before.
>
> Instructor: What happened?
>
> Student 1: I don't want to talk about it.
>
> Student 2: I'd like to talk about what happened to me - maybe that'll help him.

The first comment of student 1 reflects conflict-free behavior - it is a simple statement of historical fact. The utterance is coded as "No Evidence." The second comment of student 1 contains clear indications of emotionality. It reflects conflict-evident. The specifications presented previously indicate the utterance should be coded as defensive. The comment of student 2 is difficult to interpret in and of itself. It is indicative of conflict-evident behavior. From the evidence contained in the utterance it would be coded as coping.

Tallying Procedure

Each of the 10 group sessions selected for analysis were coded for 1) coping behavior; 2) defensive behavior; or 3) conflict-free behavior (No Evidence). The number of utterances coded in each of these three categories was totaled. Then the categories were added together to obtain a total of all student utterances coded. This total, the totals for the three categories of coded utterances and the duration in minutes of the session were recorded in table form with the corresponding group code number (Table 5.1).

Training of the Judges

The coding of student utterances for coping and defensive behavior requires extensive training in the application of the Kroeber-Haan framework of ego functioning to student verbal behavior. The following training procedure was established to enable judges to become competent in coding student verbal behavior according to this framework.

Judges were instructed to carefully study the framework of ego functioning as it was first proposed separately by Kroeber (1963) and Haan (1963), and later elaborated upon by Haan (1977). Following this study the judges were examined in their comprehension of the framework's specifications by listing 1) the four functional categories of the ego; 2) the ego mechanisms characteristic of each ego function; 3) six properties of coping behavior; and 4) six properties of defensive behavior.

Upon successful demonstration of competency in identifying the specifications of the framework the judges were then trained in the applications of these specifications. Twenty statements were provided to each judge in written form. They were instructed to code each statement for coping behavior or defensive behavior.

When sufficient competency was demonstrated in coding written statements the judges were provided with an audio-tape recorded interview and allowed to practice recording and coding the subject's responses. The judges and the trainer discussed by logical analysis coded utterances which were held in disagreement until a coding was agreed upon.

Following practice coding with tape recorded utterances the coders were provided audio-tape recordings of group discussions. The judges were instructed to record and code all student utterances in the recorded selections. Again, coding disagreements were discussed until a coding was agreed upon.

After sufficient practice was attained two coder reliability tests were performed. The results of the test were 0.81 for recognition of utterances and 0.67 for coding the utterances. The reliability was considered satisfactory and the coders were instructed to begin coding the GD-TSS sessions selected for analysis of student coping and defensive behaviors.

DATA COLLECTION

The specific procedures used to code and record instructor psychosocial utterances and student coping and defensive utterances were very similar. Identical group sessions were used for both methods of coding in order to test whether any associations were present. For these reasons data collection procedures will be discussed with reference to both methodologies.

Selection of Sessions for Analysis

The GD-TSS Evaluation Study team collected audio and video tape recordings of every session for each of the 10 groups included in the study. If every session of every group were subjected to the analysis discussed in this chapter the time required to accomplish this task would have exceeded 480 hours. Because this quantity of time was not available to the evaluation team an analysis of all the sessions for each of the 10 groups was ruled out.

Given the resources and the time available to the evaluation team one session from each group was randomly selected from a stratified random pool. The sessions represented in this pool were selected on the basis of the following criteria:

1) analysis would not be performed on the first session from any group;
2) the audio portion of the video tape recordings or the audio tape recordings must present clearly audible instructor and student responses; (Any session presenting inaudibly recorded sections would not be included in the pool.)
3) the total session time must be constituted by at least 50% of instructor-student or student-student interaction;
4) the instructor's verbal behavior must not comprise more than 50% of the total class time spent in interaction.

At least one session from eight of the ten groups met all four of these criteria. Most of the groups had several sessions which met these criteria. Two groups had no sessions which met the fourth criterion. A session was selected from these two groups that most closely approximated the fourth criterion.

All the sessions from each group meeting these criteria were pooled. One session from each group was selected at random for analysis. Three groups presented only one session meeting or approximating the criteria. These sessions were selected for analysis.

Order and Assignment of Selected Sessions to Judges

Ten sessions, one from each group, were selected in the manner described above. The ten sessions were randomly ordered and assigned to two judges. Each judge received a set of five sessions to code.

two judges. Each judge received a set of five sessions to code. Following a satisfactory intercoder reliability test the judgegs were instructed to begin coding.

Intercoder Reliability Tests

Sessions to be used in the performance of intercoder reliability tests were obtained from the sessions remaining in the stratified random pool. All the remaining sessions for the groups that met the four criteria listed previously were pooled. From this pool three sessions were randomly selected. The three sessions were then randomly ordered.

Three intercoder reliability tests were performed: 1) immediately preceding the coding procedure for the first group assigned; 2) following the completed analysis of two sessions by each judge; 3) following the completed analysis of four sessions by each judge. The judges were instructed not to continue coding the next assigned sessions until the reliability coefficient had been computed and a satisfactory reliability level achieved.

Intercoder reliability for recognition of utterances was computed using simple percent agreement. The results of intercoder reliability tests for recognition of instructor psychosocial utterances were 0.91, 0.82 and 0.71. For recognition of student utterances the results of the reliability tests were 0.81, 0.92, and 0.72.

Intercoder reliability for coding recognized instructor psychosocial utterances according to ego stage and valence and for coding student utterances for coping, defense or no evidence was initially computed using simple percent agreement. The results of intercoder reliability tests in coding recognized instructor psychosocial utterances were 72%, 69% and 66%. The results of intercoder reliability tests in coding recognized student utterances were 61%, 65% and 77%.

Because simple percent agreement fails to take into consideration the total number of coding categories used to code any given utterance, it was decided to check the lowest reliability scores against a more accurate measure of intercoder reliability. A Guetzkow (1950) correctness of classification measure was performed on that reliability which demonstrated the least percentage of intercoder agreement. The

Guetzkow test is a measure of intercoder agreement which indicates the accuracy by which the items have been coded. The percent of intercoder agreement of coding instructor psychosocial utterances to which the measure was applied was 66%. The correctness of classification attained was 0.76 with a level of significance of .05. This indicated sufficiently high intercoder reliability for the coding of ego-stage and valence to be considered reliable.

A similar measure was performed on the percent agreement of 61% computed for the first intercoder reliability test of coding student utterances. The correctness of classification attained was 0.76, with a level of significance of .05. This indicated sufficiently high intercoder reliability for the coding of student utterances as coping, defensive or no evidence to be considered reliable.

Collection of Data

The judges used audio-tape recordings of the randomly selected sessions to code instructor psychosocial utterances and student utterances. Each judge coded privately and independently of the other judge. The judges were instructed to accurately record and code the instructor or student utterances on the appropriate coding form. Each utterance was coded as it was recorded. In addition the judges were instructed to time the amount of the class period devoted to instructor-student or student-student interaction.

Following the complete analysis of a session all the extra pages to the coding form used to record and code utterances were numerically arranged. The coding form was then filed until both phases of the analysis were complete. Tallying of the data was performed after the coding procedures were completed.

FINDINGS

Interpretation of Tables

The results of the analysis of instructor and student verbal behavior are presented in Tables 5.1, 5.2 and 5.3. Table 5.1 summarizes for each group the total number of utterances coded in each category for instructor psychosocial utterances and for student utterances. In addition the total time coded is given for each group in the second vertical column from the left. The mean and range for all 10 groups of the total time coded, and each of the coding categories is provided. Table 5.2 provides for each group the percent of the total utterances represented by the number of coded utterances in each coding category. The mean and range for the 10 groups is also provided. Table 5.3 provides the frequency in utterances per minute for the total number of instructor psychosocial utterances and student utterances coded, and the frequency of utterances per minute for each of the coding categories.

The tables are read in the following manner. Group 6 maintained codable group interaction for 80.5 minutes (Table 5.1). During this period the instructor made a total of 117 psychosocial utterances, 32 or 27.3% (Table 5.2) of which were positive and 85 or 72.7% negative. The total number of psychosocial utterances represents a frequency of 1.5 psychosocial utterances per minute (Table 5.3). The instructor made positive psychosocial utterances at the rate of 0.4 per minute, and negative psychosocial utterances at the rate of 1.1 per minute.

Student utterances are tabulated in a similar manner. For group 6 the total number of student utterances occurring during the 80.5 minutes was 280 (Table 5.1). 41 or 14.6% (Table 5.2) of the total number of utterances reflected coping behavior, 111 or 39.6% reflect defensive behavior, and 128 or 45.7% reflect no evidence of either coping or defensive behavior. Student utterances were made at the rate of 3.5 per minute. Coping utterances occurred at a rate of 0.5 per minute, defensive utterances at a rate of 1.4 per minute, and utterances reflecting no evidence of either coping or defensive behavior at the rate of 1.7 per minute.

The mean and range of all groups for the duration of coded group interaction, for the total number of utterances and for the total number of utterances for each coding category are provided in Table 5.1. For example, the mean number of positive psychosocial utterances made is 246, with a range of 246 utterances between the group instructor making the least number of positive psychosocial utterances and the instructor making the most. The mean number of coping utterances for all 10 groups is 32 with a range of 57 utterances between the group with the least number of coping utterances and the group with the most.

The mean percent of positive psychosocial utterances for all 10

groups is 56.6% with a range of 48.9%. The mean percent of student coping utterances is 10.6% with a range of 12.8%.

Table 5.1

TOTAL NUMBER OF UTTERANCES FOR EACH CODING CATEGORY OF INSTRUCTOR PSYCHOSOCIAL UTTERANCES AND STUDENT UTTERANCES AND THE TOTAL CODING TIME FOR EACH GROUP

		Instructor Psychosocial Utterances			Student Utterances			
Group Code No.	Total Time Coded	Total Number	Total Number Positive	Total Number Negative	Total Number Utterances	Total Number Coding	Total Number Defense	Total Number of Evidence
1	122.2	465	218	247	480	67	101	312
2	84.3	412	160	252	363	14	249	100
3	75.0	247	162	85	361	56	136	169
4	100.0	335	253	82	349	28	169	152
5	88.5	342	208	134	238	27	85	126
6	80.5	117	32	85	280	41	111	128
7	107.0	435	241	194	368	10	101	257
8	120.5	732	444	288	270	34	79	157
9	44.0	341	260	81	109	12	13	84
10	115.5	816	481	335	253	30	57	166
Total	937.5	4242	2459	1783	3071	319	1101	1651
Mean	93.8	424	246	1178	307	32	110	165
Range	78.2	699	449	254	371	57	236	228

Table 5.2

PERCENT OF TOTAL UTTERANCES FOR EACH CODING CATEGORY OF INSTRUCTOR PSYCHOSOCIAL UTTERANCES AND STUDENT UTTERANCES

	Instructor Psychosocial Utterances			Student Utterances			
Group Code No.	% Positive	% Negative	Total %	% Coping	% Defense	% No Evidence	Total %
1	46.9	53.1	100.0	14.0	21.0	65.0	100.0
2	38.8	61.2	100.0	3.9	68.6	27.5	100.0
3	65.6	34.4	100.0	15.5	37.7	46.8	100.0
4	75.6	24.4	100.0	8.0	48.4	43.6	100.0
5	60.8	39.2	100.0	11.3	35.7	52.9	99.9
6	27.3	72.7	100.0	14.6	39.6	45.7	99.9
7	55.4	44.6	100.0	2.7	27.4	69.8	99.9
8	60.6	39.3	99.9	12.6	29.3	58.1	100.0
9	76.2	23.8	100.0	11.0	11.9	77.1	100.0
10	58.9	41.1	100.0	11.9	22.5	65.6	100.0
Mean	56.6	43.5		10.6	34.2	55.2	
Range	48.9	48.9		12.8	56.7	49.6	

Table 5.3

FREQUENCY OF UTTERANCES/MINUTE FOR EACH CODING CATEGORY OF INSTRUCTOR PSYCHOSOCIAL UTTERANCES AND STUDENT UTTERANCES

Group Code No.	Total Time Coded	Instructor Psychosocial Utterances			Student Utterances			
		Total Number	Total Number Positive	Total Number Negative	Total Number Utterances	Total Number Coping	Total Number Defense	Total Number Evidence
1	122.2	3.8	1.8	2.0	3.9	0.5	0.8	2.6
2	84.3	5.0	1.9	3.0	4.3	0.2	3.0	1.2
3	75.0	3.3	2.2	1.1	4.8	0.7	1.8	2.3
4	100.0	3.4	2.5	0.8	3.5	0.3	1.7	1.5
5	88.5	3.9	2.4	1.5	2.7	0.3	1.0	1.4
6	80.5	1.5	0.4	1.1	3.5	0.5	1.4	1.6
7	107.0	4.1	2.3	1.8	3.4	0.1	0.9	2.4
8	120.5	6.1	3.7	2.4	2.2	0.3	0.7	1.3
9	44.0	7.6	5.9	1.8	2.4	0.3	0.3	1.9
10	115.5	7.1	1.8	1.2	2.2	0.3	0.5	1.4
Mean	93.8	4.6	2.5	2.2	3.3	0.3	1.2	1.7
Range	78.2	6.1	5.5	6.2	2.6	0.6	2.7	1.5

The mean number of instructor psychosocial utterances per minute that are positive is 4.6 with a range of 6.1. The mean number of student coping utterances per minue is 0.3 with a range of 0.6

Instructor Psychosocial Utterances

The results of the analysis of instructor verbal behavior are given in Tables 5.1, 5.2 and 5.3. Table 5.1 reflects for each group the total number of instructor psychosocial utterances coded, the number of utterances in each coding category, and the mean and range for all the groups. The highest number of positive psychosocial utterances were coded for the instructor in group 10 (481); the fewest number positive psychosocial utterances for the instructor in group 6 (32). Although this reflects a large range, five instructors made between 200 and 300 positive psychosocial utterances. Only two instructors made more utterances. Three made less.

Table 5.2 provides the relative proportion of positive and negative psychosocial utterances for each group instructor. The table controls for the variance of the total number of psychosocial utterances coded for all 10 instructors. The greatest percent of positive psychosocial utteraces were made for the instructor of group 9 (76.2%). The least percent of positive psychosocial utterances were made for group 6 (27.3%). A large variance is also indicated by these numbers. 50 - 70% of all psychosocial, utterances, however, were positive for five group instructors. Three instructors made less, and two made more.

Table 5.3 indicates the rate in utterances per minute at which psychosocial statements were made by each instructor. The table controls for variance in the length of coded group interaction among the 10 groups. The instructor for group 9 had the highest rate of total psychosocial utterances (7.6 per minute). The instructor for group 6 had the lowest rate (1.5). These two instructors also had the highest and lowest rates for positive psychosocial utterances, respectively. There is significant amount of variance here also, but five instructors made positive psychosocial utterances at the rate of 3.0 - 4.5 per minute. One instructor had a much lower rate, and four had a much higher rate.

Student Utterances

The results of the analysis of student verbal behavior are given in Tables 5.1, 5.2 and 5.3. The tables serve similar purposes to those indicated in the discussion of instructor psychosocial utterances.

Table 5.1 indicates considerable variance in student participation, reflected in the total number of student utterances as well as for the number of utterances in each of the three coding categories. Group 1 had the most number of student utterances (480) and group 9 had the fewest number (109). The greatest number of coping utterances were coded for group 1 (67) and the least for group 7 (10). The greatest number of defensive utterances were coded for group 2 (249) and the least for group 2 (13). The number of student utterances reflecting no evidence of either coping or defensive were greatest for group 1 (312) and the least for group 9 (84).

The variance among the groups for the coding categories is even more evident in Table 5.2. The percent of student utterances coded as coping was greatest in group 3 (15.5%) and the least in group 9 (1.0%). The percent of student utterances coded as defensive was greatest in group 2 (68.6%) and the least in group 9 (11.9%). The percent of student utterances reflecting no evidence of either coping or defensive utterances was greatest in group 9 (77.1%) and lowest in group 2 (27.5%).

Table 5.3 also reflects variance among the groups. The highest rate of total student utterances was recorded for group 3 (4.8 per minute). The lowest rate was recorded for group 8 and 10 (2.2 per minute). Group 3 had the highest rate of coping utterances (0.7 per minute). Group 7 had the lowest rate (0.1 per minute). The highest rate of defensive utterances was recorded for group 2 and the lowest for group 9 (0.7 per minute). All but two groups had substantially higher rates of utterances reflecting no evidence of either coping or defensive utterances. Group 1 had the highest rate in this category (2.6) and group 2 had the lowest rate (1.2).

A clustering of several groups within a fairly narrow range is apparent from the tables. All 10 groups reflected less than 20% of coping utterances. Eight groups were coded between 20-40% for percent defensive utterances. Eight groups were coded within 40-70% for percent no evidence utterances. Clustering around a narrow range is less evident for the rates of student utterances, with the expception of the coping category. In this category, all 10 groups recorded between 0.0 - 1.0 utterances per minute.

DISCUSSION

Research has demonstrated that to help students to change and grow an instructor must facilitate learning by positive psychosocial behaviors. Although seven out of the 10 instructors had more positive than negative psychosocial behaviors only two instructors had more than 66 percent positive psychosocial behavior. This means that five instructors had only slightly more positive than negative statements, while three instructors had more negative than positive statements. It can be readily seen that an instructor who had 50 percent of his statements as positive statements had one negative statement one out of every two statements. In other words half of what the instructor says within the psychosocial aspect of the group interactions either does not contribute to and most likely detracts from the establishment of an accepting, supportive and constructive learning environment.

A second aspect of good group instruction is the extent to which student experiences reflect the possibility of change and growth, that is, coping behavior. These experiences necessarily involve conflict-evident behavior. Therefore, good group instruction will reflect substantial evidence of student coping behavior as well as some student defensive behavior.

The results of analysis of student verbal behavior indicate only a small portion of student behavior reflects coping behavior. The mean percent of coping behavior observed for all ten groups was 10.6. The mean percent of defensive behavior observed was 34.2, and the mean percent observed for student behavior reflecting no evidence of either coping or defensive behavior was 55.2. All ten groups reflected less than 16% coping behavior. Eight groups fell within a range for defensive behavior of 20-40%. More than 50% of student verbal behavior was coded as conflict-free in six groups.

The data on conflict-free behavior provide important insights. It will be recalled that conflict-free or nonpsychosocial statements do not give evidence of personal involvement. The examination of the data shows that conflict-free behavior occurs at a mean rate five times that observed for coping behavior. To appreciate the significance of this findings is necessary to review the objectives of the state curriculum for the GD-TSS program.

The state curriculum for the GD-TSS program identifies several objectives which are concerned with fostering a student's willingness to examine and consider the possibility of changing his/her attitudes and behavors. Student behavior which indicates a willingness to examine and possbly change attitudes and behaviors would be reflected in a significant amount of what is referred to here as conflict-evident behavior, behavior which reflects psychological involvement in and commitment to the subject matter faced by the group. Yet the largest proportions of students' behaviors were in the conflict-free (nonpsychosocial) category. This indicates little or no involvement of students at a personal level of participation where change of behavior or growth would be expected. In other words, there is little evidence to indicate that there is much significant involvement by the students as measured by their psychosocial behavior.

A Pearson product-moment coefficient of correlation was performed to determine the association between the instructor's positive psychosocial statements and students' coping behavior. Although it was recognized that the sample size was small (n=10), the decision was made to determine association by computing coefficients of correlation based on certain patterns reflected in the raw data.

An insignificant correlation (r = .01) was found between the instructors' positive psychosocial statements and students' coping behaviors. There is no firm explanation for this finding. Certain explanations can be proposed. The high percentages of negative psychosocial statements may have had an adverse effect. For example, students may have been less willing to follow positive statements from the instructor with coping behaviors because of the large amount of negative input by instructors. The compulsory nature of the education may contribute to the students' unwillingness to respond favorably to an instructor's positive statements. This possibility emphasizes even more the requirement for greater efforts to develop constructive relationships. To maintain that because of the compulsory nature of the education there is little if any meaningful relationships between students andinstructor does not hold up in terms of the findings reported in this Evaluation Study. Although no association was found between the instructors' positive utterances and coping, a relatively high correlation (r = .38) was found between the instructors' negative utterances and the students' defensive behaviors. These results may indicate that an instructor may be able to relate and influence more directly on the negative relationships than on the positive. It also could indicate that had the positive statements been more frequent a more constructive relationship may have been established. These results raise serious questions about the instructors' performance in regard to the establishment of an environment conducive to meaningful and significant learning.

CHAPTER SIX

The Resolution of Conflict and Instructor Teaching Style in the Wisconsin GD-TSS

OVERVIEW

This part of the Evaluation Study examines teaching styles, group conflicts, and how they occur in relation to each other. The analysis of teaching style and group conflict is important because each is a significant variable affecting a group member's learning. The extent of a group member's learning involves the satisfaction of needs. A teacher cannot avoid the fact that each individual learner has his/her own needs and that these needs invariably lead to conflict when they differ. In order to make effective use of a particular teaching style and for constructive instruction to occur, knowledge of such conflicts is essential. Specific frameworks have been used for examining the teaching styles and group conflicts that occur in the representative Wisconsin GD-TSS learning groups.

Four evaluation objectives were established for the analysis of the teaching styles and group conflicts. Accordingly, answers are provided in this part of the Evaluation Study for the following evaluation questions:

1. What are the teaching styles of the instructors in the representative groups?
2. What are the group conflicts in the representative GD-TSS groups?
3. What are the resolutions to the group conflicts in the representative GD-TSS groups?
4. What is the occurrence of teaching styles in relation to group conflicts in the representative GD-TSS groups?

One focus of this part of the Evaluation Study is to analyze teaching styles. A framework was selected which provides an exclusive and exhaustive means for determining an instructor's teaching style (Getzels and Thelen, 1960). It accounts for the three orientations toward which instruction can be directed: the needs of the institution and/or society; the needs of the instructor and/or the individual learner; the needs of the group as determined by the needs of the learners and the requirements of the institution. The names nomothetic, idiographic, and transactional were given to these three teaching styles, respectively. A nomothetic teaching style is one which reflects institutional expectations and is directed toward satisfying institutional goals. A nomothetic instructor is a role figure who carries out the responsibilities and duties which are considered essential by the encompassing institution. An idiographic teaching style is directed toward satisfying the personal needs of the instructor and/or the individual learner. An idiographic instructor uses a uniquely individual approach in attempting to satisfy these needs. A transactional teaching style is oriented toward satisfying needs within the structure of the group. A transactional instructor's emphasis is on assisting the group to integrate individual needs with institutional requirements and/or the requirements of the task. The teaching styles in the representative GD-TSS groups were examined according to this framework.

The second focus of this part of the Evaluation Study is the examine group conflict. Group conflict results from and reflects both the underlying concerns which individuals bring to groups and the extent to which these underlying concerns are dealt with in the group. Group conflict also results from and reflects the underlying concerns which are caused by the current situation in the group. A framework was selected which provides the means for examining and understanding these group conflicts (Whitaker and Lieberman, 1964). This framework is called Focal Conflict/Group Solution. This approach views any group function as the result and reflection of an underlying conflict between two opposing group impulses. A group conflict is considered to be the outgrowth of an underlying impulse or wish which is opposed by an associated counter-impulse or fear. The name focal conflict has been given to this underlying conflict. In working through a focal conflict, a group arrives at a group solution. A group solution tends toward satisfying the underlying group wish or alleviating the group fear. If the group solution tends toward satisfying the group wish, it has a freeing effect and permits the group to express and explore underlying concerns. If the group solution tends toward alleviating the group fear, it works against free expression and exploration of underlying group concerns. The schema presented below illustrates the relationships among the concepts of this framework.

WISH	X	**FEAR**
Talk about drinking behaviors	(in conflict) with	If these behaviors shared, the instructor will recommend further treatment

GROUP SOLUTION

Don't talk about drinking
behaviors

If a solution satisfies the wish, it is referred to as an Enabling group solution. If a solution alleviates the fear, it is called a Restrictive group solution. In the example above, the solution to the focal conflict is restrictive.

The underlying concerns which groups deal with and/or which are caused by the current situation in the group are psychosocial concerns. A psychosocial concern is based upon and determined by how one sees oneself in relation to the world or the life conditions in which one is functioning. When one becomes a member of a group, the focus of his/her psychosocial energies concerning the relation between the self and the world are directed at and revolve around the interpersonal conditions within the group. The group world, with its own unique life conditions, becomes the environment which provides satisfaction and within which the self must function. If the underlying concerns of the group members are psychosocial, then the focal conflict which arises out of these concerns is also psychosocial. And because this focal conflict is psychosocial, it will parallel what Erik Erikson (1950) has called a conflict between basic attitudes in his theoretical framework of individual psychosocial development. This framework considers psychosocial development as a process of moving through and resolving eight psychosocial conflicts. These conflicts are:

Trust vs Mistrust
Autonomy vs Shame, Doubt
Initiative vs Guilt
Industry vs Inferiority
Identity vs Role Confusion
Intimacy vs Isolation
Generativity vs Stagnation
Ego Integrity vs Despair

Since a group wish is always growth enhancing, it will reflect the positive characteristics of one of these conflicts. Conversely, the associated group fear will reflect the negative characteristics of this conflict. This framework provides the specificity with which to categorize group wishes and fears, and thus the focal conflict/group solution. In the previous example, the focal conflict is Trust vs Mistrust. The group solution is Mistrust. This solution is restrictive.

The third focus of this part of the Evaluation Study is to determine which teaching styles occur during the various focal conflict(s)/group solution(s). Focal conflict and teaching style are signficant variables affecting a group member's learning. Focal conflicts arise out of the underlying group concerns over the interrelationship between and satisfaction of individual needs and institutional demands. A teaching style must be employed which allows the group concern with the integration of needs and demands to be worked through and resolved if instruction is to be educationally effective. The teaching style which promotes the interrelationship of group concern, individual needs, and institutional demands is the transactional style. A transactional teaching style brings together the needs of the individual learners and the demands of the institution within the group. To focus exclusively on individual needs or on institutional demands creates an unrealistic situation because learning involves both aspects. There are times when it is desirable to emphasize one or the other; however, the predominant style should be transactional because it combines both the individual and institutional aspects of learning. A determination of the predominant teaching styles which occur during the focal conflict(s)/group solution(s) in the representative GD-TSS groups is, for these reasons, important.

RATIONALE

The Wisconsin GD-TSS program has been designed to provide OWI offenders with a constructive means for learning new behavior and developing more positive attitudes concerning drinking and driving. In the official document which states the curriculum for the GD-TSS program, seven objectives are listed. Two emphases within these curricular objectives are:

1) The instructional groups will provide opportunities for individuals to examine and reflect upon their attitudes and behavior concerning the use of alcohol and its relation to the driving task.
2) Individuals will be more able to modify their drinking/driving behaviors if they are provided with the opportunity to examine their personal needs which lead to the misuse or abuse of alcohol.

In order to determine whether the GD-TSS program is meeting its objectives, it is necessary to look at both the group environments and the extent to which these environments encourage individuals to examine their behaviors and attitudes that relate to their use of alcohol. If the instructional groups are well constructed, functioning properly, and meeting the curricular objectives listed above, they will exhibit the following two characteristics:

1) Each small group is a conducive and satisfying learning environment, where individuals are encouraged to share, discuss, and evaluate their attitudes and understandings about alcohol and where they benefit from relating these attitudes and understandings to personal behaviors, values, and beliefs;
2) The group environment enables individuals to look at their personal needs that relate to drinking and driving and helps them to develop more positive behaviors for satisfying their needs.

The instructional mode of the Wisconsin GD-TSS program is the small instructional group. Two important dynamics in instructional groups are teaching style and focal conflict/group solution. Each is a fundamental variable which affects both the learning environment and the extent to which individuals can modify their behaviors. By examining the teaching styles and focal conflicts/group solutions that occur within the representative GD-TSS groups, and by understanding how they relate to each other, it is possible to determine whether the program is meeting its stated objectives. In addition, an understanding of these two dynamics and their relation to each other provides evidence of the quality and quantity of learning.

Focal conflicts are an integral part of small groups. They emerge out of the group interaction and refer to the conflicts between the underlying wishes and fears of a group. Focal conflicts have two other characteristics. Since the group is the environment which provides satisfaction and within which each member must function, focal conflicts reflect basic individual psychosocial concerns and can be categorized according to the psychosocial framework of Erik Erikson. An example from a GD-TSS group will illustrate one of the eight possible focal conflicts.

> A group's conversation centers around the embarrassment over being arrested. Group members are upset that their names have been published in the newspaper and that people are saying things about their arrest. Some members are also concerned about what their children think about their arrest. Statements about the police are made. Some members are openly hostile and consider their arrest unfair. Others talk about how helpless they felt when being arrested. These are real and pressing concerns with which the group must deal. The concern with embarrassment and the hostility toward the police reveal other issues. Beneath the surface of the conversation, it is evident that the group is also angry at the instructor for embarrassing them by talking about their arrest and implying that they cannot control their drinking. The group is angry because the instructor is controlling them - he determines what will be talked about. The hostility which is vented at the police, then, is also meant for the authority figure in the group - the instructor. The group wishes to confront the instructor but fears that punishment, in the form of embarrassment, belittling, or even referral, might result. They are faced, then, with the problem of either standing up for themselves or sitting back and taking it. This is a focal conflict of Autonomy X Shame and Doubt.

In the process of working through a focal conflict, a group will need to establish a solution. A solution resolves the underlying conflict by establishing some procedure for the group. There are two kinds of solutions. An enabling solution allows the group wish to be expressed. A restrictive solution will not allow the wish to be expressed because the fear associated with its expression is too great. For example, in the illustration above, an enabling solution would allow the group to openly express its feelings toward the instructor. A restrictive solution would prohibit the expression of these feelings.

An enabling or positive solution to a focal conflict is important for a number of reasons. First, if a group is to promote learning, its atmosphere should be one in which individuals freely share and discuss their attitudes and understandings. Positive solutions provide for this type of atmosphere.

Secondly, a positive group solution relieves the group anxiety over a basic psychosocial issue. It provides opportunities for the expression and exploration of the conflictual feelings relating to this basic developmental issue. If these feelings are put out into the open, they can be more adequately dealth with.

A third reason that a positive group solution is important is that it promotes behavioral change. A group can have a tremendous influence on the individual and his/her behavior. An individual's behavior within a group is shaped by the interpersonal situation of the group. Each member, as part of the dynamics of the group, cannot fail to be acted upon by these dynamics. Because focal conflict/group solution is one of these fundamental dynamics, it has a strong effect on individual behavior. When a group is working through a particular focal conflict, the psychosocial concerns and behaviors of the individual group members become focused in this area. This is illustrated in the following example of Trust X Mistrust focal conflict.

> John isn't about to talk about his drinking habits. He is concerned that he has been drinking too much lately, but he is not willing to share these feelings with anyone. He is unsure where the other group members stand. If he talks openly, they might think he is an alcoholic. John believes people react this way. John is also aware of the fact that the instructor can refer him for further treatment. John feels the instructor probably would if he ever found out how much John really drinks. The other group members begin to talk about their drinking habits. Some are amazingly candid. This surprises John. Even the instructor appears sympathetic. He seems to understand the group members' problems. The group makes John feel that he isn't the only one who is concerned about drinking. John decides to participate because the group appears to be helping those members who are talking about their feelings.

In this example, the group is moving toward a positive solution to the focal conflict of Trust X Mistrust. The group members wish to reveal their concern over their drinking and to get help and advice from the group. An enabling solution allows the group to express and explore this wish and for the group's social need to trust to be satisfied. This solution affects the psychosocial behavior of all the group members regarding this basic issue. For an individual like John, who has a developmental problem in this area, the effect of the positive group solution on individual behavior is even more dramatic.

The fourth reason why a positive solution to a focal conflict is important relates to individual behavioral change and group movement. In order to significantly affect the behaviors of all the group members, the group needs to move progressively through all eight focal conflicts. Each group member has particular psychosocial concerns and behaviors depending on his/her stage of development. In order for all group members to benefit in their behavioral development, the focal conflicts have to be resolved positively so the group can progress and attend to all of these concerns. A subsequent chapter in the Evaluation Study will deal with group movement and group development in greater detail.

An instructor is the most important influence in the development of a positive solution to a focal conflict. Two contributing factors to this influence are that the instructor stands outside of the focal conflict (focal conflict can only be grasped by someone who views the group from a perspective different from the individual members), and that the group members naturally assume that he/she has authority and power. But, by far, the most significant reason for the great influence which an instructor has on the solution to a focal conflict lies within the group itself. It has been established that focal conflict is an integral part of small groups; it arises within the group and becomes a group problem. If this focal conflict is to be resolved positively, the group, as a whole, must receive the attention of the instructor. An idiographic teaching style cannot possibly meet the group needs relating to focal conflict because it is oriented specifically toward the needs of the individual. The nomothetic teaching style cannot satisfy a group's focal conflict needs either because it is oriented toward meeting the demands of the institution and/or society. Only within the transactional teaching mode can the focal conflict needs of the group be positively resolved because the two variables which generate the focal conflict - the individual needs and the institutional demands - are brought together in the group and resolved by the group.

In order, then, to establish a conducive learning environment and to effect behavioral change, an instructor style should be transactional. It is the only style which allows focal conflict/group solution to emerge without interference. If the group's concerns are to be relevant to the individual members, if their energies are to be effectively focused, and if behavioral change is to occur, the shared psychosocial needs which are reflected in the focal conflict/group solution must be allowed to develop in the group and be resolved by the group. If the instructor assists the group in developing an environment which permits a wide range of psychosocial issues to emerge, group members will be affected in significant and positive ways. That is, if an instructor assists in making the group environment an "enabling" one, the influence of the group will effect positive behavioral change in the individual member.

METHODOLOGY

The methodology set out here provides the basis for identifying and describing teaching style as nomothetic, idiographic, or transactional, and for identifying and describing group conflict, using the focal conflict/group solution theoretical framework as a model and the Eriksonian theoretical framework as content. This methodology has two focuses: 1. Teaching styles; 2. Group conflict.

Specifiations of Variables

Teaching styles -- In order to provide an in-depth analysis of the teaching styles that ocurred within the representative GD-TSS groups, a comprehensive theoretical framework was needed. It was decided that the framework developed in "The Classroom Group as a Unique Social System" by Thelen and Getzels (1960) provided an operational means for this analysis. It accounted for the three orientations toward which instruction might be directed: the needs of the institution and/or the society; the needs of the instructor and/or the individual learner; the needs of the group as determined by the needs of the individuals and the requirements of the institution. It was a framework that was applied successfully in other studies (Walberg, 1967a, 1967b).

Nomothetic -- Nomothetic instruction refers to those behaviors and/or utterances which are reflective of institutional expectations and which are directed toward the satisfaction of institutional goals. Instructor behavior is clearly seen as normative; as a role incumbent, he/she carries out the responsibilities and duties considered essential by the encompassing institution. Nomothetic instruction, then, is externally defined: delegated privileges, obligations, and power are executed by the instructor apart from any personal characteristics.

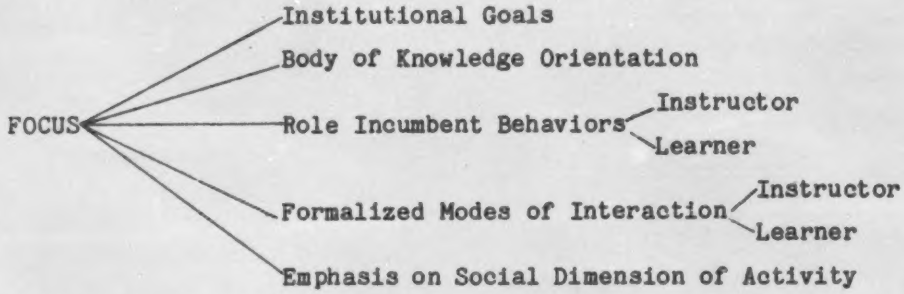
Learner behavior is also interpreted according to the obligations and requiements of the institution. Because nomothetic instruction reflects the philosophy that the most expeditious route to a goal lies within the institutional structure, learner behavior is considered role related and performance of role requirements is emphasized.

Within the programming role, a nomothetic instructor follows a predetermined, curricular framework, i.e., experiences, class content, and activities, whose aim is the satisfaction of institutional goals.

Within the guide role, a nomothetic instructor emphasizes normative problem-solving for the purpose of arriving at institutionally accepted conclusions.

Within the resource role, a nomothetic instructor utilizes curricular materials and/or bodies of knowledge when information is solicited.

Within the facilitation role, a nomothetic instructor does not consider socio-emotional or psychosocial concerns pertinent to either role requirements or the requirements of the institution.


FOCUS
Institutional Goals
Body of Knowledge Orientation
Role Incumbent Behaviors
Instructor
Learner
Formalized Modes of Interaction
Instructor
Learner
Emphasis on Social Dimension of Activity

Idiographic -- Idiographic instruction refers to those behaviors and/or utterances which are directed toward satisfying the individual needs of the instructor and/or the learner. Instructor behavior is uniquely individual; it arises from personality need - dispositions which are grounded in his/her own biological constitution. Idiographic instruction, then, is internally defined: behavior is oriented toward the satisfaction of personal needs.

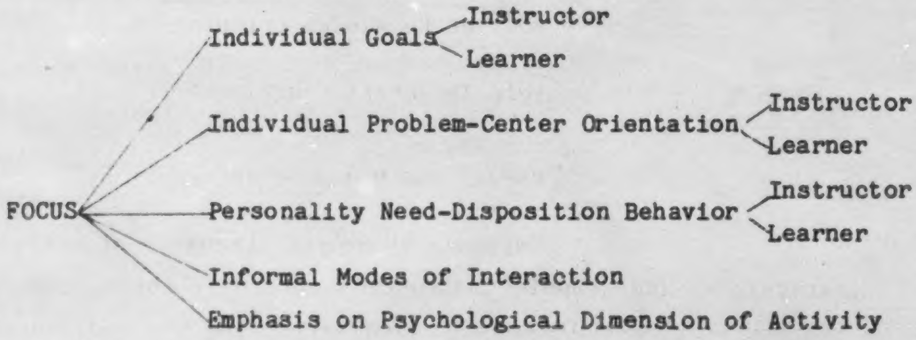
Learner behavior is also interpreted according to personality need-dispositions. Because idiographic instruction reflects the philosophy that the most expeditious route to the completion of the goal lies within the learner, individual expression of personality needs is encouraged and individuality and variation are emphasized.

Within the programming role, an idiographic instructor allows either his/her needs or the individual learner's needs to determine the nature of experiences, class content, and activities.

Within the guide role, an idiographic instructor can function in two ways with regard to problem-solving: 1) instructor answers his/her own questions, fosters adherences to his/her own methods of synthesis or analysis, or intervenes during problem-solving in such a way as to lead learner to conclusions which satisfy instructor needs; or 2) instructor allows learner to answer questons in ways which are conducive to his/her needs, to synthesize or analyze according to needs, or to arrive at conclusions which are congruent with the satisfaction of personal needs.

Within the resource role, an idiographic instructor offers both solicited and unsolicited information. This information is aimed at satisfying the individual need-dispositions of the instructor or the learner.

Within the facilitation role, an idiographic instructor expresses or invites expression of personality needs.


FOCUS
Individual Goals
Instructor
Learner
Individual Problem-Center Orientation
Instructor
Learner
Personality Need-Disposition Behavior
Instructor
Learner
Informal Modes of Interaction
Emphasis on Psychological Dimension of Activity

Transactional -- Transactional instruction refers to those behaviors and/or utterances which are directed toward the group as an entity and which are aimed at satisfying group intentions. Instructor behavior is understood in relation to the group; his/her emphasis in on the integration of individual needs with institutional expectations within the group context. Instructor assists in the development of roles within the group and aids in adapting these roles to the specific personalities of the individual members. Role expectations within the group are defined with these need-dispositions in mind.

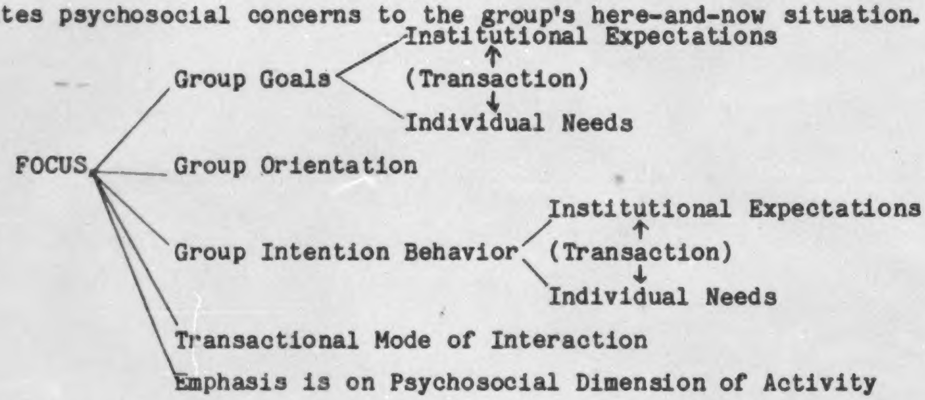
Group behavior revolves around group intention, which is understood to be a transaction between institutional expectations and individual needs. Because transactional instruction reflects the philosophy that the most expeditious route to a goal lies within the group's here-and-now situation, behavior is transactional and can be understood in relation to group context.

Within the programmer role, a transactional instructor assists group in becoming its own programmer with respect to its own unique needs and the requirements of the institution.

Within the guide role, a transactional instructor assists group in becoming its own analyzer and synthesizer.

Within the resource role, a transactional instructor helps to foster interdependency so individual members become resources.

Within the facilitation role, a transactional instructor addresses an individual need as if it were the concern of the whole group and relates psychosocial concerns to the group's here-and-now situation.


Institutional Expectations
(Transaction)
Individual Needs
Group Goals
FOCUS
Group Orientation
Institutional Expectations
Group Intention Behavior
(Transaction)
Individual Needs
Transactional Mode of Interaction
Emphasis is on Psychosocial Dimension of Activity

__Group Conflict__ -- The Focal Conflict/Group Solution framework developed by Whitaker and Lieberman in __Psychotherapy Through the Group Process__ (1964) was selected because it provided for an in-depth analysis of group conflict. It provided an effective means for applying the psychosocial theory of development by Erik Erikson (1950) to group conflict.

In order to understand group conflict, the existence of shared, underlying concerns which are the property of the group is assumed. This approach views a group function as the involvement of underlying conflict between two opposing motives or impulses together with various attempts to achieve a solution to the conflict. The conflict consists of an impulse or wish opposed by an associated counter-impulse or fear. Moreover, because a group wish is always rooted in growth, it reflects the positive characteristics of a psychosocial crisis (Erikson, 1950). Conversely, the associated group fear will reflect the negative characteristics of the crisis. The conflict of the group is referred to as the Focal Conflict. The group wish is referred to as the Disturbing Motive. The group fear is referred to as the Reactive Motive. Thus, it is possible to describe a conflict in the following manner:

1.)	Disturbing motive	X	Reactive motive
	(wish or growth)	(in conflict with)	(fear or movement away from growth)

2.) The disturbing motive and reactive motive will reflect the the positive and negative characteristics of an associated psychosocial crisis.

In working through focal conflicts, groups attempt to find solutions. A solution represents a compromise between the opposing forces; it is directed primarily at alleviating the reactive motive (fear or movement away from growth) but also attempts to satisfy the disturbing motive (wish or growth). Because a group wish is growth enhancing and reflects the positive characteristics of a psychosocial crisis, a group solution which tends toward a satisfaction of this group wish reflects the positive resolution characteristics and promotes group growth. This type of solution is called an Enabling group solution. If a group solution tends toward satisfying the reactive motive (fear or movement away from growth) at the expense of the disturbing motive (wish or movement toward growth), the solution will reflect negative resolution characteristics. This type of solution is called a Restrictive group solution. Restrictive group solutions are not growth enhancing.

Coding Procedures

The material above discusses the specifications for the two variables in this part of the *Evaluation Study*. This portion will describe the coding procedures.

Teaching styles -- The coding procedure required that the judge (coder) listen only to instructor utterances. An utterance is defined as a statement in the form of a sentence or a sentence fragment. The judge was not to note minimal instructor utterances.

The procedure required that the judge keep track of each utterance by coding it according to one of the three teaching styles. At the end of each minute interval, the judge was to look at his/her utterance codings and make a decision as to which teaching style was most predominant during that interval. The judge then placed an X through the letter which stood for the appropriate teaching style on a coding sheet. This was referred to as a primary coding.

If, during the minute interval, there was another style which comprised at least 1/3 of the utterance notations, a slash (/) was put through that style on the coding sheet. This was a secondary coding.

If no codable instructor utterance occurred during the minute interval, the judge was to circle the 0 on his/her coding sheet.

After twenty minutes of coding, the tape was to be stopped. The judge was to look over his/her minute interval codings and make a judgement as to what the predominant teaching style was for that twenty minute period. Changes in teaching style direction were noted with an arrow between the appropriate teaching style symbols and the emphasized style was circled.

At the end of the session, the judge was to review his/her minute and twenty minute codings and write a concise paragraph summarizing the instructor's teaching style.

Group Conflict -- The coding procedure for focal conflict/group solution was identical to the one employed in the Group Phase Development portion (Chapter 7) of the Evaluation Study. A complete description of this procedure can be found in the methodology section of that chapter.

Training of Judges

The material above explained the procedures which judges employed when coding teaching styles and group conflict. This part of the methodology explains how they were trained.

Teaching styles -- The judges read "The Classroom Group as a Unique Social System." They wrote ten specifications for each of the three teaching styles from memory. The coding methodology was explained to them and all questions were answered. The judges then reviewed a training tape and coded it according to the coding procedure. Reliability was established and the coding began.

Group conflict -- The judges read *Psychotherapy Through the Group Process*. Ten specifications were then written for each of the eight focal conflicts/group solutions. The coding methodology was explained and all questions were answered. The judges then viewed a training tape and coded it according to the coding procedure. Reliability was established and the coding began.

Tallying Procedures

The material above discussed the procedures which the judges followed when coding teaching styles and group conflict. This portion of the methodology explains the tallying procedures.

Teaching styles -- The primary codings within each of the three teaching style categories were totaled for each of the selected sessions. The percentage of time spent in each of these styles was then computed for each of the sessions.

Group conflict -- The group solutions to the focal conflicts which occurred during each of the selected sessions were listed.

Reliability

Before the sessions were coded according to teaching style and group conflict, a satisfactory reliability level in identifying and describing each variable needed to be established.

Teaching style -- Two twenty minute segments were chosen from two different sessions and were coded by the judges. Reliability was computed on the primary codings by comparing the agreements and disagreements between the two judges in this area. The reliability for the primary codings was 77.5%

Group conflict -- One sixty minute segment was chosen and coded by the judges. The reliability for the two judges was 100%.

DATA COLLECTION

The group sessions which were coded according to teaching style and group conflict were selected on the basis of the following procedure:

1. One session was to be selected from each of the ten representative groups.
2. Neither the first nor the last session was selected because it was assumed that these sessions would be unrepresentative.
3. Video and audio had to be of good technical quality.
4. The amount of the group interaction time in the session had to be 50% or more.

One random selection from each of the ten groups was then made from among the sessions which satisfied these criteria. Thus, the sample was composed of ten randomly selected sessions from the ten representative groups.

THE FINDINGS

Reliability

In order to maintain an acceptable level of reliability in the coding of teaching style and group conflict, each judge's reliability was tested repeatedly.

Teaching styles -- Three reliabilities were given - the first before the coding began, the second after each judge had coded two tapes, and the third after each judge had coded four tapes. Reliability was computed on the primary codings for a twenty minute segment. The results for the three reliabilities are as follows:

Reliability #1 = 77.5%
Reliability #2 = 90 %
Reliability #3 = 90 %

Group conflict -- Four reliabilities were given. The reliabilities were given on the first session, the fourth session, the seventh session, and the tenth session. Reliability was computed on the focal conflicts and on the group solutions for a sixty minute session. There was almost total agreement between the judges.

Minor discrepancies ocurred in two of the reliabilities. On reliability three, both judges coded an Autonomy X Shame and Doubt focal conflict. One judge coded a group solution of Autonomy (slight). The second judge coded Shame and Doubt (slight) and indicated in his notes that the group did exhibit Autonomy. A discussion was held between the two coders, and an agreement was reached that the group solution was Autonomy.

On reliability four, one judge coded the group as resolving an Autonomy X Shame and Doubt focal conflict negatively. The second judge's coding was identical. A discrepancy occurred, however, when the second judge detected a second focal conflict, Initiative X Guilt, during the last ten minutes of the session. This was discussed, and it was decided that the whole session was one focal conflict resolved in favor of Shame and Doubt.

Findings

Table 6.1 shows the percentage of the total time which the ten representative instructors spent within each teaching style.

Table 6.1

Total Percent of Three Teaching Styles for Ten Randomly Selected Sessions of Ten Representative Groups

Teaching Styles	Total %
No Instructor Talk	7.0
Nomothetic	35.8
Idiographic	55.2
Transactional	1.6
TOTAL	99.6

The predominant teaching style within the representative GD-TSS groups was the idiographic style. The instructors spent 55.2% of their time focusing on their own personal needs or on the personal needs of the individual learners.

The next most predominant style was the nomothetic teaching style.

The representative instructors spent 35.8% of their time functioning as role figures who focused on satisfying the needs of the institution and/or society.

The transactional style occured 1.6% of the time. That is, out of every one hundred behaviors the instructors exhibited, approximtely two could be classified as integrating needs of individuals with demands of

Table 6.2

Total Percent of Focal Conflict/
Group Solution for Ten Randomly
Selected Sessions of Ten Representative
Groups

Focal Conflict/ Group Solution	Total %
1. Trust (wish) Mistrust (fear)	4.5 5.6
2. Autonomy (wish) Shame, Doubt (fear)	3.4 47.0
3. Initiative (wish) Guilt (fear)	0.0 0.0
4. Industry (wish) Inferiority (fear)	5.8 18.9
5. Group Identity (wish) Fragmentation and Diffusion (fear)	0.0 1.2
6. Intimacy (wish) Isolation (fear)	1.1 2.4
7. Generativity (wish) Stagnation (fear)	0.0 0.0
8. Group Integrity (wish) Despair (fear)	0.0
Transition	9.7
Total	99.6

the institution and/or society. It is significant to note that the instructors remained silent for 7% of the time.

Table 6.2 shows the percentage of time that the representative groups spent in each of the eight possible focal conflicts and the percentage of positive and negative solutions to these focal conflicts.

The left side of Table 6.2 lists the eight possible focal conflicts which groups encounter and need to resolve. A positive solution to a particular focal conflict would exhibit the characteristics of the group wish. A negative solution to a focal conflict would exhibit the characteristics of the group fear.

Five focal conflicts were present in the representative GD-TSS groups. In each case, the negative solution percentage is greater than the positive solution percentage. The most prevalent focal conflict was Autonomy X Shame and Doubt. It occurred 50.4% of the time in the representative groups. This focal conflict was resolved negatively more than nine out of every ten times it occurred. The second most prevalent focal conflict was Industry X Inferiority. This focal conflict occurred 24.7% of the time. It was resolved negatively nearly eight out of every ten times it occurred.

Table 6.3 shows the percentage of the occurrence of the three teaching styles within the various focal conflicts/group solutions in the representative groups. The teaching styles appear on the left side of the table and the percentage of their occurrence within each of the group solutions can be read across the table. The focal conflicts/group solutions are indicated on the top of the table and the percentage of the group solution occurrence within each of the teaching styles can be read in the vertical columns. For example, the idiographic style's occurrence in the negative group solution to the focal conflict of Autonomy X Shame and Doubt is found in the fourth column (26%). This means that 26% of the time spent in the representative groups was focused on satisfying personal needs and in resolving the focal conflict Autonomy X Shame and Doubt negatively.

DISCUSSION

In this chapter, the teaching styles and focal conflicts/group solutions were examined. These two variables are an integral part of

Table 6.3

PERCENT OF INCIDENTS IN ONE MINUTE DURATIONS OF THREE TEACHING STYLES OCCURRING DURING FOCAL CONFLICT/GROUP SOLUTION FOR THE TEN RANDOMLY SELECTED SESSIONS OF THE TEN REPRESENTATIVE GD-TSS GROUPS

	FOCAL CONFLICT/GROUP SOLUTION																	
Teaching Styles	Trust	Mistrust	Autonomy	Shame Doubt	Initiative	Guilt	Industry	Inferiority	Identity	Role Confusion	Intimacy	Isolation	Generativity	Stagnation	Ego Integrity	Despair	Transition	TOTAL
No Talk	.3	1.0	0.3	2.8	0.0	0.0	0.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.0
Nomothetic	.4	2.4	0.2	17.9	0.0	0.0	3.2	7.4	0.0	0.7	0.6	0.3	0.0	0.0	0.0	0.0	2.7	35.8
Idiographic	3.8	2.2	2.7	26.0	0.0	0.0	2.4	9.4	0.0	0.5	0.5	2.1	0.0	0.0	0.0	0.0	5.6	55.2
Transactional	0.0	0.0	0.2	0.3	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.6
TOTAL	4.5	5.6	3.4	47.0	0.0	0.0	5.8	18.9	0.0	1.2	1.1	2.4	0.0	0.0	0.0	0.0	9.7	99.6

small groups. In addition, each is a fundamental variable which affects both the learning environment and the extent to which individuals can modify their behavior. The question then arises as to what do the data indicate about the function of these two variables within the Wisconsin GD-TSS program?

In regard to focal conflict, four reasons were given as to why they need to be resolved positively. Positive solutions help to promote a satisfying learning environment, relieve group anxiety over basic psychosocial issues, provide for individual behavioral change, and assist the group to move and develop so that the behaviors of all group members can be significantly affected. The findings presented in Table 6.2 clearly indicate that the group solutions to the focal conflicts which occurred in the representative GD-TSS groups were overwhelmingly negative. If, indeed, focal conflicts are important and if positive group solutions have a significant influence on the aforementioned aspects of learning and small groups, then the GD-TSS program, as it now stands, neither meets the needs of the individual members nor the demands of the institution and/or society. If the data concerning teaching styles is considered, both the reasons for the prevalence of negative group solutions as well as a possible direction in which to turn can be found.

It has been argued in this chapter that only a transactional style of teaching can allow for positive solutions to focal conflicts. That is, it is the only teaching mode which can integrate individual needs and institutional and/or societal demands. Table 6.1 shows that the idiographic and nomothetic styles was used 91% of the time in the representative groups. Transactional occurred only 1.6% of the time. Table 6.3 indicates that most of the group solutions were negative, that most of the teaching styles were idiographic and nomothetic, and that there is a relationship between these two variables. From this, it can at least be concluded that idiographic and nomothetic teaching styles are associated more with negative group solutions than with positive solutions. The lack of occurrence of the transactional style must make the conclusions from the data tentative. However, while the data do not show that the transactional teaching style leads to positive group solutions, the very fact that transactional style does not occur to any significant extent does, at the very least, point in a new direction. In other words, the data clearly indicate limitations of the idiographic and nomothetic teaching styles to such an extent that the transactional style deserves an extensive test of its merits.

CHAPTER SEVEN

Phase Development in the GD-TSS Groups

THE EVALUATION QUESTION

The Group Dynamics - Traffic Safety Program is conducted in classroom groups. Each participant in the program brings to his/her group dynamics class a set of attitudes. In addition, each participant brings to the group the concerns and problems which are of importance at this time in his/her life. Thus, the classroom group begins its existance as a collection of the problems, concerns, attitudes and behaviors of its members. Another way of saying this is that the small group reflects the psychosocial concerns of human growth and development.

As GD-TSS participants share their experiences with one another and interact with each other, the group becomes more than a collection of the concerns of its members. It becomes a social system. A social system is defined as an organization of persons who relate to one another and share a common purpose (Boyd, 1980).

The group, as a social system, deals with the concerns of human growth and development in a predictable manner. It goes through a sequential series of phases of social development analagous to the stages of psychosocial growth observable in individual development. The group not only deals with the psychosocial concerns of individual development in an ordered, step-wise manner, but does so in a way which is either negative or positive. This idea of the relationship between individual psychosocial development and group social development and its implications for the Traffic Safety Program is dealt with more fully in the next section of this chapter.

As a classroom group goes through a sequential set of phases which parallel those of individual development, group members have an opportunity to examine and gain insight about past and present attitudes, behaviors and concerns. This self-examination of one's past and present attitudes and behaviors is one of the desired goals of the Group Dynamics Program.

Realizing the importance of this educational goal, the Evaluation

Study included an examination of group development. To accomplish this task of examining the development of the GD-TSS groups, three objectives have been identified. These three objectives together provided a complete analysis of the quality and quantity of social development present in the GD-TSS groups. They were as follows:

1) to determine which phases of social development were dealt with by two representative GD-TSS groups;
2) to determine the serial order of these phases of development;
3) to determine whether the phase development present within these groups was negative or positive.

The findings from these analysis would be used, along with the other analyses presented in this report, to evaluated the effectiveness of the Group Dynamics Program.

THE IMPORTANCE AND BACKGROUND OF THE EVALUATION QUESTION

One of the goals of the Group Dynamics Program is that individual participants reflect on and gain insight about those attitudes and behaviors which involve alcohol use and are detrimental to the driving task. This gaining of insight is one of the major functions of small group instruction. As the group goes through a sequential set of phases which parallel those of individual development, group members have the opportuity to reflect on past and present attitudes, behaviors and concerns. This relationship that exists between an individual's concerns and the social development of the group can best be understood by looking first at individual development.

The Individual

One way to look at individual development is to describe it in terms of behaviors and attitudes. That is, an individual's way of thinking and acting is formed and becomes part of his/her life style as he/she grows physically and relates both to others and to one's self over the years. One authority in the field of human development, Erik Erikson (1950), describes individual growth and development in just this way. He describes individual development in a series of stages, each of which is composed of attitudes and ways of behaving.

According to Erikson, each person forms certain basic attitudes and ways of behaving at each stage of development. The attitudes formed at each stage are carried throughout life and influence the kinds of attitudes generated at later stages in life.

The attitudes which are formed at the various stages of development have both positive and negative components. In the healthy individual the positive components outweigh the negative components at each stage of development. The positive attitudes developed at each stage provide strength and momentum for a person in succeeding stages. They lay the foundation for the formation of positive attitudes in the future. Negative attitudes which are formed may cause stress and anxiety for a person later in life. They may even lead to social behavior which is not acceptable. These attitudes may be altered and become more positive or negative in their orientation as the individual encounters situations and relationships in the present which offset the experiences of his/her past.

For example, the first stage of psychosocial development Erikson describes is that of Trust-Mistrust. An individual with a strong sense of Trust feels comfortable sharing his feeligs and problems with others. He/she believes that others can be counted on for help and support in time of need. On the other hand, a person with a strong sense of Mistrust does not feel comfortable sharing his/her problems with others. He/she believes that others cannot be counted on for help. Such an individual may come across problems at some point in his/her life which may be too much to handle alone. Because this person does not feel comfortable sharing these problems with anyone, he/she may turn to alcohol to relieve the immediate anxieties and stress of the situation. If this individual becomes intoxicated and then drives, it is possible that he/she will be arrested for driving under the influence of alcohol and become a participant in the Group Dynamics Program. How the GD/TSS group can help this person become more trusting and comfortable with sharing his/her feelings and problems with others is the next issue.

Erickson's theory or the psychosocial framework of human development thus provides a way of organizing and understanding individual behaviors and attitudes. The psychosocial framework can also be used to understand group development and to explain the relationship between an individual's behaviors and attitudes and the process of group development. Both of these aspects are discussed below.

The Group

The GD-TSS groups are composed of individuals who bring to the group setting their personal attitudes, problems and concerns. In addition, individual group members relate to one another over the course of the group's existance and share common feelings and attitudes. The group can be characterized, then, as a social system which reflects the concerns of human growth and development.

As a social system, the small group reflects the concerns of human development in a predictable, ordered manner. This can be readily illustrated by the many studies which show that groups deal sequentially with such problems as trust, authority and productivity. (Tuckman, 1965; Shambaugh, 1974).

Other authorities in the field of group dynamics go even further. They indicate that the small classroom group not only reflects the concerns of human development in a predictable manner but that it does so in a series of phases which replicate the stages of individual development in quality and quantity as well as sequence, (Saravoy, 1975; Dunphy, 1968). Thus, each time a small group is formed, a social system comes into being. It proceeds, over the course of its development, through phases which are analagous in number, type and sequence to the stages of development an individual goes through over the course of his/her life time.

More specifically this means that a framework such as the one Erik Erikson uses to describe individual psychosocial development can be used to describe the social development of the small classroom group (Davie, 1971; White, 1976). Just as an individual develops a prevailing set of attitudes at each stage of development, so a group develops a prevailing climate or culture. Like the individual's set of attitudes, a group's culture will be predominantly negative or positive at each phase. For example, the first phase of social development in the group is Trust-Mistrust. While the group is in this phase, it will develop a culture which is either predominantly trusting or mistrusting. The eight phases of group development which are based on Erikson's eight stages of individual development are described in the methodology section of this chapter.

The Individual and the Group

When a person enters a group for the first time, he/she perceives the group as an unfamiliar and uncertain situation. The thoughts and feelings generated by this strange situation and the unfamiliar faces are very much like those which are part of the first stage of psychosocial development when an individual learns to trust.

To deal with this situation, each group member reviews his/her past experiences of Trust and Mistrust. As the individual's relationship with the group continues, he/she systematically reviews all of his/her psychosocial concerns in the same sequence in which they historically occured in his/her past (Tucker, 1972).

This personal review of psychosocial concerns is prompted by the developmental phases of the group. At each phase of its development, the group forces the individual to examine those attitudes from his/her past which correspond to the present social concerns of the group. In addition, individual group members cannot move ahead in their sequential review of psychosocial concerns until the group as a whole moves on to the next phase of its development.

For example, when a group deals with Autonomy-Shame and Doubt in the the second phase of its development, individual members must also review their experiences of Autonomy-Shame and Doubt. No group member can go on to his/her concerns about Initiative and Guilt, which is the next psychosocial stage, until the group itself moves on to that phase of its development.

Authorities in the field of human development and learning believe that whenever a new learning situation is presented to an individual in a way which coincides with the organization of remembered thoughts, feelings and experiences within the person the potential for learning and the gaining of insight is very high (Pribham, 1960). Thus, the coincidence of individual psychosocial and group social concerns present in the GD-TSS groups provides a potentially excellent setting in which participants may gain insights about their personal attitudes and behaviors.

It is not enough, however, that the individual's systematic review of past and present psychosocial concerns coincide with the social phase development of the group. The small classroom group must also offer the individual the opportunity to reconsider and to change ways of thinking and behaving which may be problematic both for the individual and for society. More specifically, the group must offer the individual the opportunity to re-work some of his/her negative psychosocial attitudes so that they take on a more positive orientation. The group must also encourage individual members to work on present concerns. The group does this by developing in each of its phases of social development a culture which predominantly positive.

When a group is actively working on phase of its social development, it builds a group culture. This contains both the negative and positive aspects of that phase. For example, a group working on the concerns of Phase 1, Trust-Mistrust will form a culture which reflects concerns about both Trust and Mistrust. Before this group moves on to the next phase of its development it comes to a conclusion or resolution about which aspects of the phase are of greater importance. This resolution is expressed in the group's culture which will, at that point, be predominantly negative or positive.

The resolution reached by the group is each of the phases of social development and reflected in the group's culture has good deal of influence on the individual group member. It provides the basis upon which he/she will or will not change some of his/her negative attitudes to a more positive orientation. For example, an individual may come into a GD-TSS group with a good deal of Mistrust. As the group deals with issues of Trust-Mistrust in a culture which becomes predominantly positive, that is Trusting, it offers that person a experience counter to the Mistrusting experiences of his/her past. This may result in this individual becoming more Trusting. In similar fashion, the small instructional group may alter the positive attitudes of its members by providing a culture in the different phases of its development which is predominantly negative.

To summarize, as a group deals sequentially with the concerns of each of the different developmental phases it gives each group member an opportunity to re-examine and gain insight about past and present attitudes and behaviors. In addition, the group culture present in each of the phases of its development may positively or negatively alter a member's attitudes.

Implications for GD-TSS

To be of benefit to all GD-TSS participants and to arrive at the goals established by the Traffic Safety School that participants examine past and present behaviors, attitudes and concerns it is essential that the GD-TSS groups deal with all of the eight phases outlined for group development. Each GD-TSS group should go through these phases sequentially and as it does so, it should develop a group culture that is predominantly positive.

This analysis will examine how many of the eight phases of development the GD-TSS groups go through. The analysis will determine if these phases occur sequentially and it will also determine whether the culture created as these groups deal with the various developmental phases is negative or positive.

THE METHODOLOGY

The method of analysis used for this part of the Evaluation Study is based on Erikson's stages of individual development. Eight positive and negative phases of group development have been described. These correspond to the eight positive and negative stages of individual psychosocial development. This methodology enabled the evaluators to monitor the social development of the group-as-a-whole. A brief description of each of these phases of group development are described below.

A Description of Group Phases and Cultures

Phase I. Trust - Mistrust

Positive Culture: Trust -- This culture is characterized by an ease in the giving and receiving of information and ideas. There is an open willingness to grasp the subject matter which is presented. There is a willingness to risk the sharing of ideas and feelings in the group. There is a feeling of optimism, a hope about the future of the group. There is a sense of meaning or purpose in what the group is doing.

Negative Culture: Mistrust -- Members do not easily or readily contribute cherished feelings, thoughts and ideas to the group. The group does not appear to be really listening to and accepting the contributions of each participant. There is a feeling of pessimism about the future development of the group. There is a sense of purposelessness and meaninglessness about the task that is before the group.

Phase II. Autonomy - Shame and Doubt

Positive Culture: Autonomy -- There is a feeling that the group has confidence in what it is doing. It is in fairly good control of the situation and seems to be "standing on its own feet," so to speak. It is able to openly discuss and assess differing suggestions, points of views, issues and problems of law and authority. It is able to come to a compromise when such a need arises.

Negative Culture: Shame and Doubt -- There is a feeling of self-consciousness and embarrassement in the group. It is as if the group has said too much and/or acted in a way which was foolish or shameful. The group does not appear to have appropriate control of itself. There maybe stubbornness or obstinance which works against a spirit of compromise. There may be a sense of rebellion or hostility in the group or the group may appear to be merely obeying orders because it cannot do anything else.

Phase III. Initiative - Guilt

Positive Culture: Initiative -- There is willingness to try new ways, to experiment, to start something new or different. There is a sense of enjoyment and pleasure as the group cooperatively plans and begins activities. There is an aggression evident in the discussions and an enjoyment of competition.

Negative Culture: Guilt -- There is a sense of guilt that the group has been getting away with something. There is a sense that the group has failed and cannot move on to new things. There is destructive rivalry present within the group. This rivalry stands in the way of cooperative planning.

Phase IV. Industry - Inferiority

Positive Culture: Industry -- The group is working at getting things done. It is committed to mastering the subject matter and completing the other required tasks of the program. Group members work together and share responsibility to accomplish these tasks.

Negative Culture: Inferiority -- There is an emphasis on avoiding work. The group talks about work rather than getting down to doing it. Evident mediocrity characterizes what little work is done. The group seems to feel that the task it must work at will not turn out well and is useless.

Phase V. Group Identity - Fragmentation and Diffusion

Positive Culture: Group Identity -- The social roles and task roles within the group are clear. There is a sense of openness within the group which permits the examination of existing roles and values. The group is tolerant of the differing values and life styles of its members. In addition, the group has a sense of being a group and its members feel they belong to this group.

Negative Culture: Fragmentation and Diffusion -- The roles within the group are not clearly defined. The group appears to be merely a collection of individuals and members have no sense of belonging. Roles and values are not examined in an open manner. The group seems to be insensitive and intolerant of the differing values and lifestyles of its members.

Phase VI. Intimacy - Isolation

Positive Culture: Intimacy -- In this culture one gets a feeling that one is watching best friends working closely together on a task. There is a feeling of warmth within the group. There is a spirit of generosity and self-sacrifice present.

Negative Culture: Isolation -- Interpersonal relations appear to be formal, correct and lacking spontaneity. There is a feeling of coldness within the group. There is no real exchange of fellowship. There is no spirit of generosity or self sacrifice present.

Phase VII. Generativity - Stagnation

Positive Culture: Generativity -- The group is very much concerned about the welfare of society. The group is also concerned about its own enrichment and growth. A genuinely mature sense of responsibility is present. There is sense of satisfaction about the direction and depth of the group's growth.

Negative Culture: Stagnation -- There is a pseudo concern for the welfare of others. The group does not really care about its members, but is just going through the motions. The group does not seem to be going any place. There is a feeling present that nothing worthwhile will come of what is being done in the group.

Phase VIII. Integrity - Despair

Positive Culture: Integrity -- There is feeling that the group has taken care of the task appropriately, productively and realistically. What the group has accomplished has been meaningful and good. What it has done fits into the goals and prupose of the ongoing program.

Negative Culture: Despair -- There is a sense of regret that the group is running out of time. There is not time to start alternative solutions. This is difficult for the group to accept. There is sincere and obvious disappointment in the group's performance. There is meaninglessness in what the group has been doing and a sense of disgust toward the program in general.

These specifications provide a general introduction to the cultural phases of group development. A detailed manual for the coding of these cultural phases has been developed at the University of Wisconsin Group Dynamics Laboratory. The manual containing these coding specifications is entitled "Manual for Coding Group Identity Cultures".

The Coding of Group Cultural Phases

The cultural phases of a group are identified by listening to and watching the verbal and nonverbal behaviors of the group. Verbal behaviors include not only the words that spoken but also the feelings that the words are communicating (i.e. anger). Nonverbal behaviors include the facial expression, eye movement and bodily posture of the majority of the group's members. Specific individual expressions are not taken into account. What is noted is the group's reaction to an individual's input. These group behaviors are then paired with the behavioral specifications for a particular cultural phase as they are set forth in the coding manual.

For example, very early in the life of most GD-TSS groups, members are asked to share the stories of their arrest. In a given group these stories are not readily or easily shared. They must be "dragged out" of group members by persistant, direct instructor questions. There is the sense that the group is holding back its experiences. Many members are looking down at the floor. Others are staring into space. There is a sense of disinterest in what is going on. In addition, the majority of group members are sitting very stiffly with arms tightly folded and legs crossed. This kind of verbal and nonverbal behavior is indicative of a group in Phase I, Trust-Mistrust. The predominating culture is one of mistrust because the group can be seen as creating conditions where sharing and other trusting behaviors are not encouraged.

For this part of the Evaluation Study two judges were selected to code videotaped sessions of two representative GD-TSS groups. Before a judge began to code a session he/she was instructed to listen to the group interaction for ten minutes. This provided the judge with an opportunity to become acquainted with what the group was doing, what the instructor's voice sounded like, which members were talking, etc. After ten minutes the video tape was rewound and coding began.

The judges were instructed to watch and listen to the verbal and nonverbal behaviors of the group. To aid the judges in maintaining their concentration on the group's behaviors, the judges were asked to write down short comments about what they were seeing and hearing.

Using the "Coding Manual for Group Identity Cultures" the judges were to make a decision about the phase and culture of the group during that session. Specifications from the manual which were used to make this decision were to be written down on a coding form which had been designed for this analysis ("Coding Form for Group Identity Cultures").

The judges were also instructecd to indicate any changes which occured in the culture during session. For example, a group might be involved in the phase of Trust-Mistrust with the predominant culture being one of Trust. Over the course of the session, the group's culture might become more mistrusting.

Ordinarily, only one phase would be present in any given group session. However, the GD-TSS sessions are longer than most group sessions and it is possible that two phases may occur during one session. For example, a group might begin a session in Phase III, Initiative-Guilt and then move to Phase IV, Industry-Inferiority over the course of that same session. The judges were to report any such changes which occurred in the group's phase during a session. Specifications from the coding manual were to be used to document all changes in culture and/or phase. The amount of time spent in a given culture and phase was also to be indicated on the coding form.

This procedure was followed for each session to be coded. The data collected by each judge included a decision about the phase and culture, specifications to support this decision and any comments written down about the group's verbal and nonverbal behavior. These were all submitted to the evaluator for compilation and analysis.

Training and Reliability

The judges selected for this part of the Evaluation Study were rigorously trained in and examined on their knowledge of Erikson's theory and on the specifications for group cultural phases found in the coding manual. Training tapes were also used to give the judges experience in coding actual groups.

Before coding could begin, reliability had to be established between the judges. That is, it had to be demonstrated that the two judges would independently agree on the coding of the culture and phase for any given segment or session of group interaction. The method of reliability used differs slightly from that which is usually used in evaluation and research in the social and educational sciences.

Intercoder reliability is usually expressed mathematically in terms of coefficient of correlation. An acceptable level of reliability is achieved when this coefficient is .70 or greater (1.00 would represent 100% agreeement). This coefficient of correlation is based on a large number of coding decisions. For example, if instructor inputs are being coded, the reliability is determined on the percent agreement between the judges for all instructor inputs made in a twenty minute time period. The number of instructor inputs during this time may range in number from 60-100

There are two factors involved in the coding of group culture which make the application of a coefficient of correlation impossible. First, the coding of a group's cultural phases cannot be done on the basis of individual inputs. It is a decision which is formed on a global impression of the verbal and nonverbal behaviors of the group as a whole. Second, a group moves very slowly through its phases of development. A change in phase is not always present in a given session. Both of these factors contribute to an extremely low number of coding decisions on the part of the judges.

The coefficient of correlation cannot be used properly with such a small number of decisions. It is also not feasible to give the judges the 60 or more segments of group interaction which would be required to use a mathematical coefficient. Nevertheless, it must be demonstrated that the judges agree on their coding of the cultural phases of group sessions.

Reliability for this part of the Evaluation Study was determined in the following manner:

1) A twenty minute videotaped segment of group interaction was given to each judge to code. Both judges agreed that the group's culture was negative, but disagreed on the phase of the group. The videotape was viewed again be both judges with the trainer and discussed until agreement was reached.

2) Another twenty minute tape was given to both judges. Both judges agreed on the culture and phase present.

3) A third videotaped segment ws given to the judges. This time there was agreement on the phase of the group's development but disagreement as to whether the culture was negative or positive. The videotape was reviewed by the judges with the trainer and discussed until agreement was reached.

4) Two two-and-one-half hour GD-TSS sessions were coded in their entirety by both judges. There was total agreement between the judges.

At this point it was decided by the trainer and director of the Evaluation Study that reliability was sufficiently established between the judges and coding of the remaining sessions could begin. This decision was based on the developing reliability between the judges. The last test of their agreement (Step 4) clearly demonstrated that they could code an extensive period of group interaction with total agreement.

This kind of investigation in the social and educational sciences involves the coding of human interactions which are very complex in nature. This complexity makes the achievement of total agreement in coding between judges very difficult. A resolution to this problem has been reached by the scientific community. An acceptable degree of reliability is achieved when the judges can review one another's findings and come to agreement through a discussion of results (Whitaker and Lieberman, 1964.

Reliability studies were repeated after each judge had coded two sessions. A detailed discussion of these results, the selection of the groups to be studied and the schedule of coding is found in the next section of this chapter.

DATA COLLECTION PROCEDURES

The proceedures for the collection and analysis of the data on the phase development of the GD-TSS groups can be divided into three tasks. These are: group selection, schedule of coding, and reliability studies. Each of these tasks is discussed below.

Group Selection

Not all of the ten GD-TSS groups participating in the Evaluation Study were chosen for the coding of phase development. Three criteria had to be met before a group was selected for this analysis. These criteria are technical quality, number of sessions and group interaction time.

Technical Quality -- In order to identify a group's cultures it is necessary to see the group in action as well as to hear what is being said. Therefore, the criterion was established that all of the group's sessions had to be on videotape. In addition, the picture had to be clear and sound audible. A significant number of technical difficulties were encountered and five of the ten groups were eliminated from this part of the study using this criteria.

Number of Sessions -- The GD-TSS program, as it has been set up by the Traffic Safety School, involves seven two-an-one-half hour sessions. It was decided by the evaluation team that an analysis of GD-TSS classes that had gone the full, required seven sessions would give a better representation of the program at large. Groups with less than seven sessions might not go through as many phases of development. The second criterion for the group selection required that a group meet for seven sessions. Of the ten videotaped groups, four were eliminated using this criterion.

Group Interaction Time -- Evidence of a group's culture is established upon the interaction that occurs among group members. Therefore, priority was given to those GD-TSS groups with a sufficient amount of group interaction. A sufficient amount of group interaction is present when more than 50% of class time is devoted to student participation and sharing. To meet this criterion of sufficient group interaction it was decided that the amount of time the teacher spent talking and the amount of time taken for films should together be less than 50% of the total class time when averaged over all the sessions. Three of the ten groups were eliminated using this criterion.

Based on the above three criteria only two of the ten groups, Group 1 and Group 4, were able to be selected for analysis of phase development. These two groups also most closely met the specifications set forth in the standards for good group dynamics by the Department of Transportation for the accreditation of the Group Dynamics Program.

Schedule of Coding

Each judge was assigned nine group sessions to code. The order in which the sessions were to be coded was predetermined by the evaluator to insure a minimum amount of bias on the part of the judges.

For example, if a judge knew he/she was coding the first session of a group he/she might be unconsciously looking for evidence of Trust/Mistrust. If this individual went on to code the second session of that group he/she might be unintentionally biased toward coding the session one of Autonomy-Shame and Doubt.

To avoid this potential for bias on the part of the judges the following criteria were used by the evaluator in determining the order in which the sessions were to coded by each judge:

1) a judge could not code two consecutive sessions for any one group;

2) the sessions of a particular group could not be coded in their historical order; (For example, if a judge was assigned to code sessions one, three, five and seven for the same group they could not be coded in that order.)

3) a judge could not code two sessions for the same group, one right after the other;

4) the judges could not know which sessions they were coding. (Thus, all sessions to be coded had to be randomly numbered).

Using these guidelines a coding schedule was designed for each judge.

Reliability Studies

The judges were instructed to code the first two sesions on their coding schedules and then wait before going on to the remaining assigned sessions. These first two tapes were the same on both schedules. They provided a final check on the reliability of the judges before each began to work independently. Both judges were in total agreement as to the phase and culture of those two group sessions. The judges were then instructed to go on and code the next three sessions listed on their schedules.

When both judges had completed coding these three sessions, a twenty minute video taped segment of group interaction was given as a test of reliability. The judges were in agreement that the group's culture was negative but disagreed as to the phase present. The videotape was reviewed by both judges with the trainer and discussed until agreement was reached.

Each judge was given a randomly selected twenty minute videotaped segment of group interaction from his/her partner's coding schedule. This reliability check was similar to the one done before the judges began working independently. The segments of group interaction used here were taken from the actual groups being coded in this analysis. The difference is that only a twenty minute segment was used instead of the entire session.

On the first of these reliabilities, the judges disagreed on the culture. In addition, one judge coded the situation as being positive while the other judge coded it negative. The video tape was reviewed by the judges with the trainer and discussed until agreement was reached. On the second videotaped segment, the judges agreed that the situation was positive, but disagreed on the culture itself. Again the videotape was reviewed by the judges and the trainer. Discussion followed until agreement was reached. The judges were then instructed to go on and code the three remaining sessions on each of their schedules.

In order to further assure the coding ability of the judges, twelve random twenty minute segments were chosen from various sessions for both judges and coded by the trainer. These results were compared with the decision made by the judge for that particular session. Of the twelve random samples coded by the trainer, nine were found to be in agreement with the original decisions of the judges. This procedure underscores the high level of competency achieved by the judges in coding group phase and culture.

The results of this analysis of the phase development of the two representative GD-TSS groups are presented below.

THE FINDINGS

The data collected from each of the two GD-TSS groups evaluated for phase development were analyzed in the following manner. First, the coded material for each group was organized so that the sessions were in proper numerical order from the first to the last session. Next, the cultural phase of each session, as well as any changes which occurred in either the culture or the phase during that session, was recorded. The results of the analysis are presented in the figures below. Figure 7.1 illustrates the data for Group 1 and Figure 7.2 shows the data for Group 4.

In examining Figure 7.1, the sessions of Group 1 are listed along the left side of the figure. The eight cultural phases of group development appear across the top of the figure. The pluses in each figure represent group cultures which were positive. The minuses indicate where a group's culture was negative. The location of the pluses and minuses on the figures give indications of the phase of development present in the group during each session. The dots on each figure form a trend line. They illustrate the sequential pattern of movement from one phase to another which might be expected to occur over the course of a group's development.

Group 1 began its first session in Phase I, Trust-Mistrust. The predominant culture was one of Mistrust. During the same session, the group moved on to Phase II, Autonomy-Shame and Doubt. Here the group culture was positive (Autonomy). The second session followed the same developmental pattern as Session one. That is, the group began with Trust-Mistrust and then moved on to Autonomy-Shame and Doubt. Unlike the first session, the culture moved from a positive one of Trust to a negative one of Shame and Doubt. The entire third session was spent dealing again with Trust-Mistrust in a culture which was predominantly Mistrusting.

In the fourth session, the group jumped to Phase III, Initiative-Guilt. The culture exhibited was positive, the emphasis being on Initiative. During this same session, the group moved directly to Phase V, Group Identity-Fragmentation and Diffusion. In this phase, the culture continued to be positive and the emphasis shifted to identity concerns. Session five found the group back in Phase III, Initiative-Guilt in a culture which was negative.

The entire period of Session six was spent in Phase IV, Industry-Inferiority in a culture which was predominantly positive. In the last session, the group returned first to Phase II, Autonomy-Shame and Doubt where the culture was negative. It ended the session in Phase I, Trust-Mistrust in a culture which was Mistrusting.

Like Group 1, Group 4 began the first session in Phase I, Trust-Mistrust. Unlike Group 1, Group 4 spent the entire session in this phase in a culture which was predominantly positive or Trusting. During

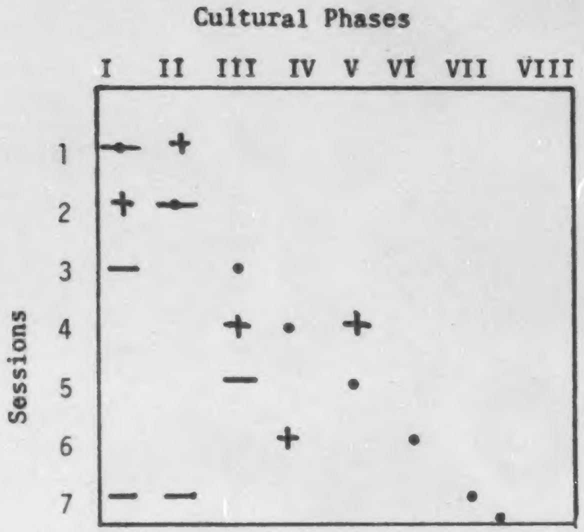


Figure 7.1 Positive and negative cultural phases over seven sessions for group 1.

(In Session 7, the progression of the phases was from a 2- to a 1-).

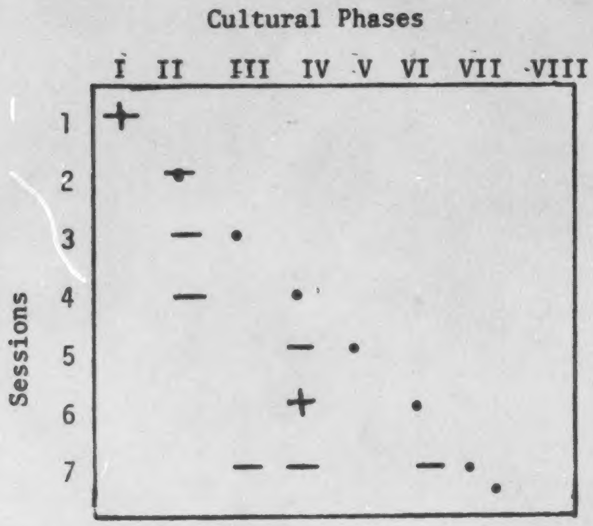


Figure 7.2 Positive and negative cultural phases over seven sessions for group 4.

(In Session 7, the phase progression was one of 3-, 6-, 4-).

Session two, Group 4 moved on to Phase II, Autonomy-Shame and Doubt. The group remained at this phase of development for Sessions two, three and four. During thhs entire time, the group's culture was negative, the emphasis being on Shame and Doubt.

In Session five, the group moved to Phase IV, Industry-Inferiority. The group culture continued to be negative with evidence of Inferiority predominating. The group continued to deal with Phase IV during Session six, but the culture became more positive with the emphasis shifting to Industry.

Session seven found the group dealing with three phases of development. The group culture in all three phases was negative. The group began the session in Phase III, Intitiative-Guilt where the emphasis was on Guilt. Next the group moved to Phase VI, Intimacy-Isolation, the data showing a predominance of evidence for Isolation. Toward the end of the session the group moved back to Phase IV, Industry-Inferiority where the culture, still negative, was one of Inferiority.

A discussion of the meaning and implications of the data presented in Figure 7.1 and Figure 7.2 follows below.

DISCUSSION

The trend line indicated by the dots in Figures 7.1 and 7.2 illustrates a possible pattern of good group phase development. This hypothetical group is seen to move through the phases of development at the rate of one phase per session. While the rate of development will differ from one group to the next, the pattern of phase development illustrated by the trend line demonstrates several of the criteria of good group development. These criteria are described below. In addition, the results obtained from each of the two representative GD-TSS groups evaluated for phase development will be examined to determine the extent to which they meet these criteria of good group development.

Number of Phases

The first criterion of good group development is that a group should go through all eight phases of social development. As a group goes through all of the eight phases it deals with the psychosocial concerns of human growth and development. It insures that each member will have an opportunity to examine past as well as present psychosocial attituues and behaviors.

Neither of the two GD-TSS groups studied in this Evaluation Study dealt with all of the eight phases of social development. This means that many of the concerns and attitudes of the participants were not examined at all. Some of these attitudes not examined may very well have been ones which originally led to some of the participants' OWI arrests.

Phase Progression

The phases of a group's development should occur sequentially from Phase I to Phase VIII. In addition, a group should not move back to an earlier phase of development. For example, once a group has progressed to Phase IV, it should not re-visit Phases I, II or III.

This forward sequential order of the eight phases of social development replicates the progression of the psychosocial development of the individual. It enhances the examination and gaining of insight about personal attitudes and behaviors by providing a learning situation which coincides with the organization of remembered thoughts, feelings and experiences within the person. In addition, the completion of the cycle of social phase development by the group provides a natural sense of closure to the learning experience.

Both of the GD-TSS groups studied began their phase development sequentially be beginning with Phase I and proceeding to Phase II. Development after Phase II is not sequential for either group. Group 1 attempts a sequential progression of phases twice and is unsuccessful. It then regresses back to Phase I. Its phases of development are haphazard from this point on with movement back to earlier phases of development occurring in Sessions three, five and seven. In Group 4, the phases of development are more orderly until Session seven. They are not sequential, however. Regression to an earlier phase of development occurs twice in Session seven.

This means that the participants in the representative GD-TSS groups studied did not have the opportunity to systematically review their attitudes and concerns in the order in which they originally experienced them. This disruption of order in the review of psychosocial concerns on the part of group members is not conducive to the re-working of those attitudes which are negative in their orientation.

Group Culture

If individual group members are to have the opportunity to re-work some of their negative attitudes it is necessary, but not sufficient, that the group move through the phases of development sequentially. The group must move through its sequential phases of development in a culture which is predominantly positive.

The culture of a group reflects both the positive and negative aspects of the phase of development which the group is in. Before a group moves on to a new phase of development it comes to a conclusion or resolution about the concerns of that phase. This resolution is reflected in tte group's culture which will be either predominantly negative or positive in its orientation.

This negative or positive resolution of the group toward the concerns of a given phase has a great impact on the individual. It determines the extent to which an individual group member will be influenced to change some of his/her negative attitudes. For example, a group deals with Phase I, Trust-Mistrust and comes to a resolution in favor of Trust. This is reflected in a group culture which is positive. This predominance of Trust in the group culture encourages each group member to become more Trusting. Therefore, the culture of a group in any of the phases of social development should become predominantly positive in its orientation before thr group moves on to the next phase of development. For example, a group in Phase I, Trust-Mistrust may start out in a culture that is predominantly negative or Mistrusting. This is acceptable as long as the culture changes to one of Trust before the group moves on to Phase II, Autonomy-Shame and Doubt. Likewise, a group should not move from a positive culture to a negative culture within a gven phase and then move on to a different phase.

The data from Group 1 indicates that in Phase I, Trust-Mistrust, the group culture changes its orientation from negative (Session one) to positive (Session two) and back to negative (Session three). The resolution for Phase I is negative when the group moves ahead in its development (Session three). In Phase II, Autonomy-Shame and Doubt, the group culture begins with a positive orientation (Session one) but becomes negative before the group moves on (Session two). This pattern is repeated for Phase III, Initiative-Guilt (Sessions four and five). The group returns to Phase I and II in the last session. The group culture continues to be negative. In only two phases is the culture of the group predominantly positive. These are Phase V, Group Identity-Fragmentation and Diffusion (Session four) and Phase IV, Industry-Inferiority (Session six). All the remainig cultures are negative.

Group 4 began its first session with Phase I, Trust-Mistrust in a culture that was predominantly positive. In Session two, the group progresses sequentially to Phase II, Autonomy-Shame and Doubt. The group spends three sessions in this phase of its development. During this entire time the culture of the group remains negative, being centered around Shame and Doubt. In Phase IV, Industry-Inferiority, the group culture moves from a negative orientation (Session five) to a positive orientation (Session six). The group returns to this phase in its last session at which time the resolution is finally negative. The predominant culture for Phase III, Initiative-Guilt and Phase VI, Intimacy-Isolation (both Session seven are also negative.

If the group is to help the individual change his/her negative attitudes it must provide that individual with an experience which offsets the unfavorable experiences of the past. It does this by developing within each of its social phases a group culture which is predominantly positive. The data collected from the two representative GD-TSS groups studies indicates that the occurrance of such positive group cultures is minimal. These groups did not offer their participants expeeiences which would have encouraged the re-working of negative attitudes.

The Role of the Instructor

The instructor has a very important role in the phase development of the small classroom group. A good instructor is able to detect when a group begins to deviate from the expected pattern of social development. He/she is always aware of which phase of development the group is in and knows whether the group culture is becoming predominantly negative or positive. He/she is aware of the phase progression of the group.

Not only is a good instructor knowledgeable about the phase development of the group but he/she also possesses the skills to direct the movement of the group back toward the path of positive development when deviation begins to occur. By monitoring a group's development in this way, the instructor helps to insure that the group experience will offer its members the opportunity for individual psychosocial development and change.

The deviation in phase development indicated in the two representative GD-TSS groups studied seems to suggest that the instructors were not able to properly monitor and/or direct the social development of their groups. Had they been able to do so, the deviation in phase development would not have been as great. The groups would have adhered more closely to the criteria of good group development.

CLOSING STATEMENT

The patterns of phase development of the two representative GD-TSS groups chosen for this part of the Evaluation Study do not meet the criteria of good group development. The phases of social development which these groups went through did not occur in the proper sequence. All eight of the phases of group social development were not worked on. The cultures developed in the majority of the groups' developmental phases were negative.

The GD-TSS Program was established to provide participants the opportunity to examine, gain insight about and work on past as well as present attitudes and behaviors. For this to occur, GD-TSS instructors must be better able to monitor and constructively direct the phase development of their groups. Specific recommendations for the training of GD-TSS instructors in phase development of the small classroom group are found in Chapter 9 of this report.

CHAPTER EIGHT

Work and Emotionality in the GD-TSS Groups

INTRODUCTION

The GD-TSS groups are instructional groups. As instructional groups they must facilitate learning and accomplish goals. In other words work must be going on in these groups. There is also another type of activity going on. It is the expression and perception of emotions or feelings. Sometimes the emotions further work and on other occasions emotions can hinder and even further the type of work that prevents the achievement of the stated group objectives. To get an accurate picture of what is occurring in an instructional group it is necessary to get a reading on the work being done and the emotions being expressed in the group. These readings are particularly important in an evaluation study. Accordingly, this Evaluation Study has examined these two factors.

CONCEPTUAL FRAMEWORK

There are several ways the factors of work and emotions in a small group can be conceptualized. It is possible to look at the behaviors of individuals and categorize their behaviors into classifications of different types of work and different kinds of emotions. Such an approach would focus on the individuals of a group and not the group, itself. The findings from such a study would tell us what individual members were doing. From the data on individuals we would have to infer what the group was like. This seemed to be an indirect way to examine the group, to determine whether the group was providing a setting for learning and the constructive expression of emotions. To obtain that type of data it was necessary to get readings on the group, itself.

Fortunately there is a conceptual framework that can be directly applied to the type of evaluation that is being sought here. Thelen and his associates (1958), building on the work of Bion (1959), proposed a theory on small groups in which they identified the two basic aspects of work and emotionality in groups. Their thesis is that there are two different modes of group life.

> "One is emotional, and is characterized by
> collective action, not listening, high

> feelings, contagion, and disorder. The other mode is sooer, reflective, and orderly; members listen to one another." (Stock, 1958).

The former they called emotionality and the latter they called work.

In our work (1980) at the University of Wisconsin, these conceptualizations of the dynamics of small groups were found helpful but they had one serious problem. Although Thelen and his students were interested in linking work and emotionality together, they did in fact separate them. Boyd (1980), on the other hand, maintains they can not be separated. All activity of groups is directed by work agendas. Emotionality becomes manifest in these agendas and can be identified as expressions of energy. When activity is disorderly, "mob-like" work is being done but the work would not be seen as positive or constructive. When activity is ordered and the group is supporting reflective thinking, work is also being done but now it is spoken of as being positive and constructive. In either case the amount of expressiveness or affect can be determined as another aspect of the activity. In other words all activity can be classified as having two aspects, work and emotionaity. Work can be either positive or negative. Emotionality is on a continuum from low to high.

Since the focus is on the group the framework employs the term culture in speaking of the group activity. Thus when the group is observed in constructive work it is described as being in a positive work culture. If the group appears interested, involved, attentive, then the level of emotionality is described as being moderate.

The following steps were taken to make the framework operational. The work aspect was divided into two types, positive and negative. A three point scale for each type of work was adopted. Each point on the scale was carefully described. An example of spcifications is given below:

Specification - Work Commitment

Positive - 3 group is totally committed	Positive - 2 group is obviously involved	Positive - 1 group shows compliance
Negative - 3 group is resisting a commitment to the officially stated task	Negative - 2 group is avoiding the officially stated agenda	Negative - 1 group is apathetic

The emotionality aspect of group activity was designated on a five point scale. Emotionality is conceptualized from the point of view of the energy or affect model. Thus it may be viewed as affect on a quantitative scale from near zero to something approaching 100 percent. The scale was specified in such terms as illustrated below:

1. Unemotional, withdrawn, indifferent, etc.
2. Calm sobriety, composed, etc.
3. Interested, involved, attentive, etc.
4. Responsive, lively, expressive, etc.
5. Excitable, zealous, spirited, etc.

The development and application of this framework provided the means to examine the group cultures of the GD-TSS groups in terms of work and emotionality. Determining the work-emotionality cultures of the GD-TSS groups would provide firm evidence by which to evaluate the level of work and emotionality of these ten representative groups and to judge them on the basis of providing supportive and constructional environments for instruction.

CODING

The culture of the GD-TSS groups in the sample was coded on both work and emotionality dimensions. The characteristics and specifications for these dimensions were previously discussed. Each dimension was coded according to criteria developed in the coding manual the "Specifications for Numerical Interpretation." The manual provided the specifications for determining whether the group's behavior is adaptive (positive) or maladaptive (negative) on the work dimension and the extent of emotionality expressed. The manual also gives definitions of the levels of work and emotionality that the groups could exhibit. These spcifications enable the assignment of quantitative values to the groups' transactions on these dimensions.

Examples of the coding spcifications will clarify this. Adaptive work is exemplified by such specifications as "Group focuses on problem;" "Group is obviously working at developing understandings and furthering the flow of pertinent information." Examples of maladaptive behaviors are: "Group allows the leader to do the work;" "Group is not reality oriented;" "Group allows egocentric pursuit of private and personal agendas."

The other aspect of the coding is the assignment of numerical values to the two dimensions. The work dimension was scored in terms of positive and negative cultures. A positive culture is one in which the group's behavior is adaptive; a negative culture is one in which the group's behavior is maladaptive. Three positive and three negative values were defined. Specifications for each of these values were provided in a coding manual enabling the coders to distinguish among the six values. A group could then be scored as, for example, 1+, or as 2-, or as 3+.

Emotionality is the amount of affect which is being expressed in the group. At any level of work some expression of emotionality is observable. For example, a group may be carefully reflecting on the alternative steps it could take next and doing so in a quiet but interested manner. It could also be doing the same kind of work but demonstrate a much higher level of excitement and involvement.

The emotionality dimension was scored on a quality free scale. That is, no positive or negative aspects of this dimension were defined. The positive and negative aspects of the group culture were determined by the work dimension of the group. A five point scale was used to score emotionality. It ranged from low emotionality (1) to moderate (3) to high (5) emotionality. Specifications were provided for each of the five levels. Emotionality was seen from the point of view of the energy model, thus the levels indicate the amount of energy that was being input into the group's transactions. These could range from expressions of emotionality at a low level, with the group being apathetic, distant, withdrawn, etc.; to a moderate level, with the group being interested, friendly, involved, etc,; to a high level of emotionality with the group being enthusiastic, showing much tension, and being excitable, etc.

The groups were coded on both dimensions in five minute segments. Each coding was entered on the "Group Culture Score Sheet". This score sheet enabled recording the work culture and level, and the emotionality level exhibited by the group for each five minute segment of group transaction.

TRAINING AND RELIABILITY OF CODERS

The coders were given the manual describing the work and emotionality cultures of groups to read. Questions about the spcifications presented in the manual were clarified. The coders were then given tape recordings of group sessions to code. These codings were discussed and misunderstandings were clarified and corrected. When all four coders were in total agreement they were given the video and audio tapes of the ten groups to code.

During the coding of the ten representative groups on work-emotionality factors two reliability tests were run. The reliability for the work codings were 83.8% and 91.5%. The reliability for the emotionality codings were 91.4% and 89.4%.

FINDINGS

The summary data for the amount of time spent at each level of work or emotionality for all ten groups in the sample is presented in Table 8.1. The left hand portion of the table provides the data for work; the right hand portion of the table provides the data for emotionality. These data will be presented and discussed later. The data presented are the percentage of the groups' interactiion time that was coded by the three levels for the positive and negative aspects of work. The rows do not sum to 100% due to rounding error. This table thus provides data on the ten groups' transactions on the work dimension in terms of the level of work done by the groups.

The data and the table are arranged in eight columns. Each row represents the data for a specific group. The columns headed " +3, +2,..., -1" provide the data for each of the three positive and negative aspects of work. The columns headed total + and total - contain the total percent of positive and negative work for each group.

The summary rows of mean and range give information about the activities of the groups at each of the six levels of work. The category with the highest percent of time spent in it is that of +1. The second highest category was -1; the other categories of work levels were distinctly lower than these two. This shows that the groups conducted themselves primarily at the +1 level of work, with other levels of work falling far behind this one.

Table 8.1

Average Amount of Time at Each Level of Work and Emotionality Expressed in Percentages for All Ten Representative Groups[a]

Group				Work					Emotionality				
	+3	+2	+1	Total +	-1	-2	-3	Total -	1	2	3	4	5
1	0.0	13.4	49.3	62.7	20.4	14.8	2.1	37.3	7.0	57.7	31.7	3.5	0.0
2	0.0	3.1	90.6	93.7	6.3	0.0	0.0	6.3	81.1	18.9	0.0	0.0	0.0
3	0.0	0.0	53.9	53.9	37.9	9.0	0.0	46.9	72.5	25.3	2.4	0.0	0.0
4	0.0	10.4	59.0	69.4	30.6	0.0	0.0	30.6	34.7	54.9	9.0	1.4	0.0
5	0.0	12.7	82.7	95.4	4.6	0.0	0.0	4.6	75.1	24.9	0.0	0.0	0.0
6	1.1	4.4	70.0	75.5	14.4	7.8	2.2	24.4	24.4	42.2	25.6	7.8	0.0
7	0.0	7.3	71.6	78.9	11.0	10.1	0.0	21.1	32.1	44.0	23.9	0.0	0.0
8	0.0	0.0	83.9	83.9	16.1	0.0	0.0	16.1	96.8	3.2	0.0	0.0	0.0
9	0.0	3.4	70.7	74.1	24.1	1.7	0.0	25.8	79.3	20.7	0.0	0.0	0.0
10	0.0	6.6	81.1	87.7	11.3	0.9	0.0	12.2	46.2	47.2	6.6	0.0	0.0
Mean	0.1	6.1	71.3	77.5	17.7	4.4	0.5	22.5	54.9	33.9	9.9	1.3	0.0
Range	0.0-1.1	0.0-13.4	49.3-90.6	53.9-95.4	4.6-37.9	0.0-14.8	0.0-2.2	4.6-46.9	7.0-96.8	3.2-74.9	2.2-31.7	1.4-7.8	0.0

[a] The data do not sum to 100% due to rounding error.

These findings indicate that while the groups were in the positive range of work the majority of the time, this involvement was at a minimal level of work. Indeed, the data show that when they were not performing here, the probability would be that the groups would be in the negative aspect of this dimension, but still at a minimal level of work.

The data for the level of work are more explicitly shown in Table 8.2, where the ten groups in the sample are rank ordered by their total scores for +1 and -1 work. As can be seen from this table, the percent of time spent by the groups at this level of work ranges from 100% for group 8 to 69.7% for group 1. The mean for all ten groups is 88.95%. Six of the groups are above the mean in the percent of time spent at this level, and nine of the groups have over 80% of their time at this level. This indicates that the vast majority of transactions within the groups have taken place at the minimal level of work possible for a small group.

Table 8.2

The Combined Levels of Work for Levels +1 and -1 Compared Against the Combined Levels of Work for Levels +2 and -2

Rank	Combined +1 & -1%	Group	Combined +2 & -2%
1	100	8	0.0
2	96.9	2	3.1[a]
3	94.8	9	5.1
4	92.4	10	10.4[a]
5	91.8	3	9.0[b]
6	89.6	4	10.4[a]
7	87.3	5	17.4
8	84.4	6	12.2
9	82.6	7	5.1
10	69.7	1	7.5

Mean = 88.95%
Range = 69.7 - 100%

[a] Total % is +2

[b] Total % is -2

An even more detailed perspective on the behavior of the groups on the work dimension is given in Table 8.3 for the positive and negative aspects of work, respectively. This table provides for each group, the percent of time spent at the +1 or -1 level; the total percent of time for all plus or minus work, and the total percent of time at the combined +2 and +3, or -2 and -3 levels of work. The means and ranges for each of these levels of work ar also provided.

As the data presented in Table 8.3 indicates, two of the groups had all their positive work coded at level +1. These are groups three and eight. Of the remaining eight groups, only one, group six, had work that was coded at more than the +2 level. This group ranked only sixth in the total amount of positive work. Seven of the groups had all their positive work at the +1 or +2 level. Four of the groups had all of their negative work coded at the -1 level. These were groups 2, 4, 5, and 8. Four of the remaining six groups, groups 1, 6, 9 and 10 had work coded at both the -2 and -3 levels. This table indicates that when the activities of the groups at levels of work greater than level 1 is examined, there is a tendency for the groups to have limited level 2 or 3 positive work and for more groups to have negative level 3 work.

Table 8.3

Percent of Time Spent at Positive or Negative Work Levels 1, 2 and 3 for the Ten Representative Groups

Group	+1	Positive Work +2 and +3	Total	-1	Negative Work -2 and -3	Total
1	49.3	13.4	62.7	20.4	16.9	37.3
2	90.6	3.1	93.7	6.3	0.0	6.3
3	53.9	0.0	53.9	37.9	9.0	46.9
4	59.0	10.4	69.4	30.6	0.0	30.6
5	82.7	12.7	95.4	4.6	0.0	4.6
6	70.0	5.5	75.5	14.4	10.0	24.4
7	71.6	7.3	78.9	11.0	10.1	21.1
8	83.9	0.0	83.9	16.1	0.0	16.1
9	70.7	3.4	74.1	24.1	1.7	25.8
10	81.1	6.6	87.7	11.3	.9	12.2

The data on the percent of time spent at the five levels of emotionality for all ten groups are presented in the right hand portion of Table 8.1. The data for the percent of time spent at each group's level of emotionality is presented in the body of the table. The bottom rows provide summary data for the means of all groups and the range of the percent of time all groups have spent at each level of emotionality.

As can be seen from the table, almost 55% of all time for all groups was spent at emotionality level 1; and one-third of the time was spent at level 2. Together these two levels account for almost 90.0% of the groups' emotional behavior. Level 4 accounted for just 1.3%. There were no transactions coded at Level 5 for any groups. As Table 8.4 indicates, four of the ten groups have had all of their transactions coded at levels 1 and 2. These are groups 2, 5, 8, and 9. Nine of the ten groups have over two-thirds of their transactions coded at these two levels; the remaining group has only slightly less of its behavior coded at these levels.

Table 8.4

Percent of Time Spent at Emotionality
Levels 1, 2 and 3 for the Ten
Representative Groups

Rank Level 1	% Level 1	Group Number	Rank Level 1 & 2	% Level 1 & 2
1	96.8	8	a	100
2	81.1	2	a	100
3	79.3	9	a	100
4	75.1	5	a	100
5	72.5	3	5	97.8
6	46.2	10	6	93.4
7	34.7	4	7	89.6
8	32.1	7	8	76.1
9	24.4	6	9	66.6
10	7.0	1	10	64.7
	Mean = 54.9			Mean = 88.8
	Range = 7.0 - 96.8%			Range = 64.7 - 100%

aThese groups are tied for ranks 1 through 4.

A Spearman rank-order correlation coefficient (Siegel, 1956) was performed to test the hypothesis that there was a relationship between low level of work and low level of emotionality in these representative groups. The two variables tested were the percent of time the group spent at work levels plus 1 and minus 1, the two lowest work levels, and the percent of time the groups spent at emotionality level 1. These ranks are reported in table 8.5. The correlation between these variables was .903, indicating an extremely high degree of relationship, supporting the hypothesis.

Table 8.5

Rank Order of Ten Representative Groups Based on Percent of Time Spent at Work Levels +1 and -1 and Emotionality Level 1

Group	Rank for Work Levels +1 & -1	Rank for Emotionality Level 1
1	10	10
2	2	2
3	5	5
4	6	7
5	7	4
6	8	9
7	9	8
8	1	1
9	3	3
10	4	6

Spearman rank-order correlation coefficient = .903.

In summary the fndings of the examination of the behavior of the ten groups in the sample on the dimensions of work and emotionality are these:

1. Groups were at the minimal level of work the majority of the time.
2. This work was generally in the positive aspect of the work dimension; with a mean value of 77.5% of the time spent at this level.

3. The second highest category was the negative aspect of work at the minimal level, with a mean of 17.7% of the time spent at this level.
4. The amount of time spent by individual groups at higher levels of positive work was slight. Only one group had any work coded at more than the +2 level.
5. Four of the groups had all their negative work coded at the -1 level. Four of the remaining groups had work coded at the -2 level, and two groups had work coded at the -3 level.
6. The levels of emotionality evidenced by the groups tended to be at the lowest level for this dimension of group behavior. Over one half of the mean time of all the groups was spent at level 1 emotionality and almost 90% of the groups mean time was spent at levels 1 and 2 on this dimension.
7. A Spearman rank-order correlation coefficient showed a correlation of .903 between minimal work and minimal emotionality for the sample. This indicates an extremely strong relationship between these two dimensions in this sample.

DISCUSSION

The purpose of the examination of the work and emotionality dimensions of the groups in the sample was to provide information regarding the amount of work and the quality of work performed by the groups and the level of emotionality used by the groups to support this work.

As the findings indicate, both the levels of work and the levels of emotionality present in the groups tended to be at a low or minimal level. The majority of time spent in work by the groups was at the +1 level; the second highest proportion of time was at the -1 level. Together these accounted for 89% of the groups' mean working time. The groups were in the positive aspect of work for slightly over three-fourth's of their mean transactions and were in the negative aspect of this for the remaining time which was close to one-fourth of their meeting time. The emotionality level of the groups tended to be low also; on the average about 90% of the time was spent at levels 1 and 2 on the emotionality dimension.

These findings cast doubt on the ability of the Group Dynamics - Traffic Safety School to fulfill the requirements of effective group dynamics and adult education practice. This conclusion is based on three factors. The first is that the groups' behavior was frequently at the lowest possible level of work. The second is the percentage of negative work the groups engaged in. The third is the low level of emotionality shown by the groups.

Work was defined by the Coding Manual as "a conscious, cognitive process concerned with resolving explicit problems." The specific problems confronting the GD-TSS groups were those outlined in the "General Course Objectives" of the Group Dynamics - Traffic Safety School Standards for Course Content and Mode of Instruction (Wisconsin Board of Vocational, Technical and Adult Education, 1978, p. I-2). These objectives were used as the standard against which the work dimension was coded. The amount of work engaged in by the groups on such factors as the quality of the work, the amount of group involvement, the focus of the work performed, etc., as detailed in the coding specifications were the basis for coding the level of work performed.

Emotionality was defined in the coding specifications as dealing with "the emotions in the group. Emotionaity is used here to encompass such terms as feelings, emotions, affect, and excitations." Emotionality within the group can be conceptualized as the amount of energy present in a group that enables it to perform its work.

On this basis the interpretation of the findings of low work levels, the proportion of negative work and the low energy level becomes clear. It is evident that the ten groups in the representative sample of GD-TSS groups were functioning at the lowest possible work level for a mean of 89.0 percent of their transactions. This represents the combined percent for +1 and -1 levels of work. This means that the groups could not be expected to fulfill the requirements of the GD-TSS curriculum at any significant level. This conclusion is supported by the amount of negative work which was 22.5 percent or over one-fifth of the groups' time. That is, one-fifth of the groups' time was taken up by avoiding, resisting or obstructing the work purposes of the program.

The findings pertaining to the level of emotionality are consonant with the finding on work. The group cultures were characterized by a low level of energy. When emotionality levels 1 and 2 are combined an average of 88.8% of the groups' time is accounted for. Levels 1 is described as apathetic, and indifferent while level 2 is described as passive and labile. These are not attributes of a group culture where significant involvement and commitment could be expected. The conclusion would have to be drawn that the emotionality of the learning environments which were observed did not exhibit much emotional commitment to the program. The correlation of .903 with a relationship between low work and low emotionality levels bears out this contention.

This examination of the levels of work and emotionality in the ten representative GD-TSS groups leads to the conclusion that the performance of the groups was for the most part minimal. The objectives of the GD-TSS program were not being achieved insofar as this was measured by the level and quality of work in the groups. Further, it would have been difficult for the groups to achieve these objectives because the energy to do so was not presented or was not being used by the groups.

CHAPTER NINE

Recommendation

INTRODUCTION

This chapter presents four sets of recommendations. The first set proposes a few changes in the delivery system for the content of the GD-TSS program. The second set of recommendations, which is the major set of recommendations, focus on specific training programs for instructors. The third set of recommendations propose further studies; their need having been indicated from the present investigation. The chapter concludes with a set of general programmatic recommendations.

The bases for the recommendations are evident from the findings presented in the preceding seven chapters. The findings have identified clearly the strengths and weaknesses. It thus remains to draw from these findings a clear set of recommendations. The plan, therefore, is to state the recommendations in a direct manner without encumbering the presentation with a review of the data and the findings.

Although the purpose of the study was to conduct an in-depth examination of the instructional aspects of the GD-TSS program, it was not possible to focus on these aspects to the exclusion of curricular structures within which instruction occurs. Instruction and curriculum are two sides of a coin. If goals of the GD-TSS program are to be realized, certain minimum curricular structures must be adopted. The recommendations for the curriculum presented in this report do not change the content of the program only the way it is organized. The recommendations do propose that a clearer statement of the objectives of the program be made explicit to the participants. There is no recommendation in this report that the basic content of the curriculum be changed.

Before the three sets of recommendations are presented, it is necessary to have a clear understanding of the primary educational thrust of the GD-TSS program and the basic instructional mode for the program. This is necessary because it was against these fundamental educational givens that the evaluation of the instructional program was made. It was also on the basis of these givens that the recommendations are made. Thus, the primary educational thrust and the basic instructional mode of the GD-TSS program are re-stated. They are so interrelated that one can not be discussed without involving the other. Therefore, the discussion which follows addresses both the educational thrust and the instructional mode of the GD-TSS program. The discussion does not attempt to present the entire rationale and educational objectives of the GD-TSS program. The intent here is to identify the core ideas that have been presented in operational terms in the preceeding eight chapters.

THE EDUCATIONAL THRUST AND INSTRUCTIONAL MODE OF GD-TSS PROGRAM

It is apparent that the Group Dynamic Traffic Safety School has been established on the principle that information alone is not sufficient to bring about changes in attitudes and behavior of those persons who have been enrolled in the program. This is not to say information is not important, but that the delivery of information by itself cannot be assumed or expected to do the educative or re-educative job. Clearly the intent of the program is that information must be dealt with in a group situation where facts, ideas, and perceptions can be mulled over and reflected upon in the company of others. This sharing between participants is crucial for both learning the information and using that information to make significant changes in understandings and attitudes about drinking and driving. This is a sound and tested position in adult education.

Studies of motivation and learning lead to even a stronger statement. Information must be tied directly to an individual's goals to become meaningful and to lead to basic learning and, in turn, to fundamental changes in attitudes and behaviors. That is, what is to be learned must be directly related to a learner's life projects. Life projects are the immediate and long-range aims or goals that an individual develops and which then influence and direct his/her behaviors. Thus, unless information is related to such life projects, we can expect little or no learning to occur and therefore little or no changes in the participants' understandings and attitudes.

It is because of this fundamental knowledge about learning that it has been argued in this Evaluation Study that the real value of the information will be found when the participants reflect upon the information in an interacting group and that information-giving alone must be rejected as a means to achieve the aims of the Group Dynamics Traffic Safety School. Accordingly one must agree with the Program's emphasis on group dynamics. This is a constructive and sound emphasis because as a model of adult education it is built upon the position that information must be reflected upon, tested, and integrated into a learner's way of thinking and seeing. The group is one of the most effective formats which provides for the exchange and testing of a learner's understandings and his/her attitudes arising from these understandings.

This is a description of group dynamics put to work for educational ends. Group dynamics can be described as sequential, on-going relationships among a limited number of persons where the flow of transactions unite the persons together as a group and provide for the exchange of information and feelings which result in growth through awareness. Group dynamics is the most appropriate format to achieve the objectives or aims of the Group Dynamics Traffic Safety School. First, group dynamics builds sequential, on-going relationships. Second, the size of the group is limited, allowing for involvement and commitment on the part of all members. Third, the development of cohesiveness which results in the active participation of members provides a situation for sharing, exploration, and self-examination. Fourth, the developing awareness of the forces that shape our lives gives the individual a chance to move from being passively directed by these forces to actively directing these forces.

Thus, the Group Dynamics Traffic Safety School Program's emphasis on group dynamics as an instructional tool is based on sound principles of adult education. As a model of adult education it is built upon the position that information must be reflected upon, tested, and integrated into a learner's way of thinking and perceiving. In terms of an instructional format, there is no better way to provide for the exchange and testing of a learner's understandings and his/her attitudes arising from these understandings than in the group setting.

As can readily be appreciated from what already has been stated, the authors of the present Evaluation Study not only agree with the basic position of the important role of group dynamics in the Group Dynamics Traffic Safety School but propose that group dynamics be the exclusive format for the seventeen and one-half hours of the instructional program. Accordingly, the Evaluation Study provides a set of operational plans which, based on the findings, would make significant improvements in the existing program.

RECOMMENDATIONS FOR THE CURRICULUM

In the previous section, the values of a group dynamics format were identified. As an instructional format, group dynamics is potentially far more powerful a means for behavioral change than the format of information giving. From the initial analysis of the Evaluation Study, it is already evident that large amounts of time were given to information giving and the consequence of this was that the time given to group dynamics within the sessions was greatly reduced. Based on these observations, a clearer emphasis and certain changes are recommended in the way the sessions are organized and conducted. These recommendations propose:

1. a curriculum that is constructed on basic topics which deal with
   a) psychosocial factors involved in drinking alcohol and in driving while intoxicated, and
   b) physiological effects of alcohol, both short and long range effects
2. the use of a programmed text dealing with alcohol and its psychological and physiological effect on the individual
3. a program design for the seventeen and one half hours of instruction to maximize the time to employ group dynamics as the mode of instruction.

These recommendations are proposed in order that the benefits of group dynamics can be more fully realized.

The Curriculum

Much work has alrady been done within existing programs in the education of OWI offenders. There are two serious criticisms that can be made of these curricula. First, many of them attempt to cover too much information and thus fail to provide a proper distribution of time to the central causes of OWI behavior. Second, and more significantly, many curricula do not systematically treat either the psychosocial variables or the physiological consequences of drinking alcohol.

The recommendation is proposed that the primary emphasis of the curriculum be made even more explicit than it is. The curriculum should emphasize that adequate time be given to the consideration of fundamental causes of OWI behavior. This requires a curriculum structure that focuses on systematic examination of psychosocial factors and physiological consequences within a group dynamic instructional format. In the existing curriculum presented in the Standards document, these topics are identified but are not presented in sufficient detail. Single statement objectives cannot give the level of understanding the instructors need to identify the basic content and to provide a general orientation for viewing behavior. The operational structure needed for effective curriculum implementation is for objectives to be accompanied by carefully written statements containing both a detailed discussion of the aims and illustrations of how these aims can be achieved through the format of group dynamics. Such specificity does not destroy the individual and unique contributions of the instructor. The authors of this Report are fully aware that the art of teaching can not be dictated. The recommendation proposes a comprehensive and detailed manual that would make explicit the conceptual basis for a program and possible ways to achieve the aims of the program.

The committee that would develop this manual should include coordinators and instructors from the GD-TSS program. Appropriate personnel from the Department of Transportation would be members of the committee. Resource professionals should be permanent members of the committee.

The manual would have three major applications. It would serve as a guide and resource for instructors. It would be used as one basic tool in the training workshop for the orientation of new instructors. The third application is as a curriculum guide to the development of a programmed text. The training workshop will be discussed in the section entitled Recommendations for Instruction. The recommendation for a programmed text will be taken up immediately.

Programmed Text

A programmed text is a book which provides for individual study. A student is given a coherent body of information which is then followed by a step sequence of questions which test the learner's comprehension of the information. This instructional tool has certain virtues. It provides individual rates of learning. In addition, it removes the negative effects of failing in public. When the learner makes a mistake he corrects himself and he alone knows of his mistake. This self correcting adds to the learner's resourcefulness and the development of a sense of self-confidence and independence as an adult learner.

The programmed text would be structured to follow the curriculum. It would contain cogent material on the effects of alcohol on the human body and would provide pertinent information on psychosocial factors which are frequently involved in the use of alcohol.

Another critical reason for proposing the use of a programmed text is the limited time that is available. Except for those who cannot read, participants can get basic information on alcohol on their own. What must be provided are opportunities for the participats to think through this information as it effects their lives. This is the real value of employing group dynamics. The GD-TSS program has assumed and it has been argued both in the Standards document and in this report that the real value of the information will be found when the participants reflect upon the information in an interacting group.

During the data gathering period a small number of illiterate adults were identified. In addition to these individuals, other adults were observed who had difficulty reading material at a six grade reading level. For the illiterate adults, the programmed text would be impossible and for the other poor readers the programmed text could be a poor instructional device. There was little accommodation made for these individuals in the programs that were observed. It is recommended that special audiotapes be developed which would parallel the material in the program text and that audio-tutorial facilities be made available to help these learners. As it is at present, these participants are seriously handicapped in learning the essential information which could make a significant contribution to their understandings. This condition needs to be corrected.

In summary, to accomplish the goals of the program, there are two conditions that must be met. First, the participants must get correct and pertinent information. Second, they must have opportunities to talk about this information in order to have it as meaningful information - that is, knowledge for their own lives.

To provide some indication of how this will work, the recommendations are set out in Figure 8.1, diagramming the first two sessions.

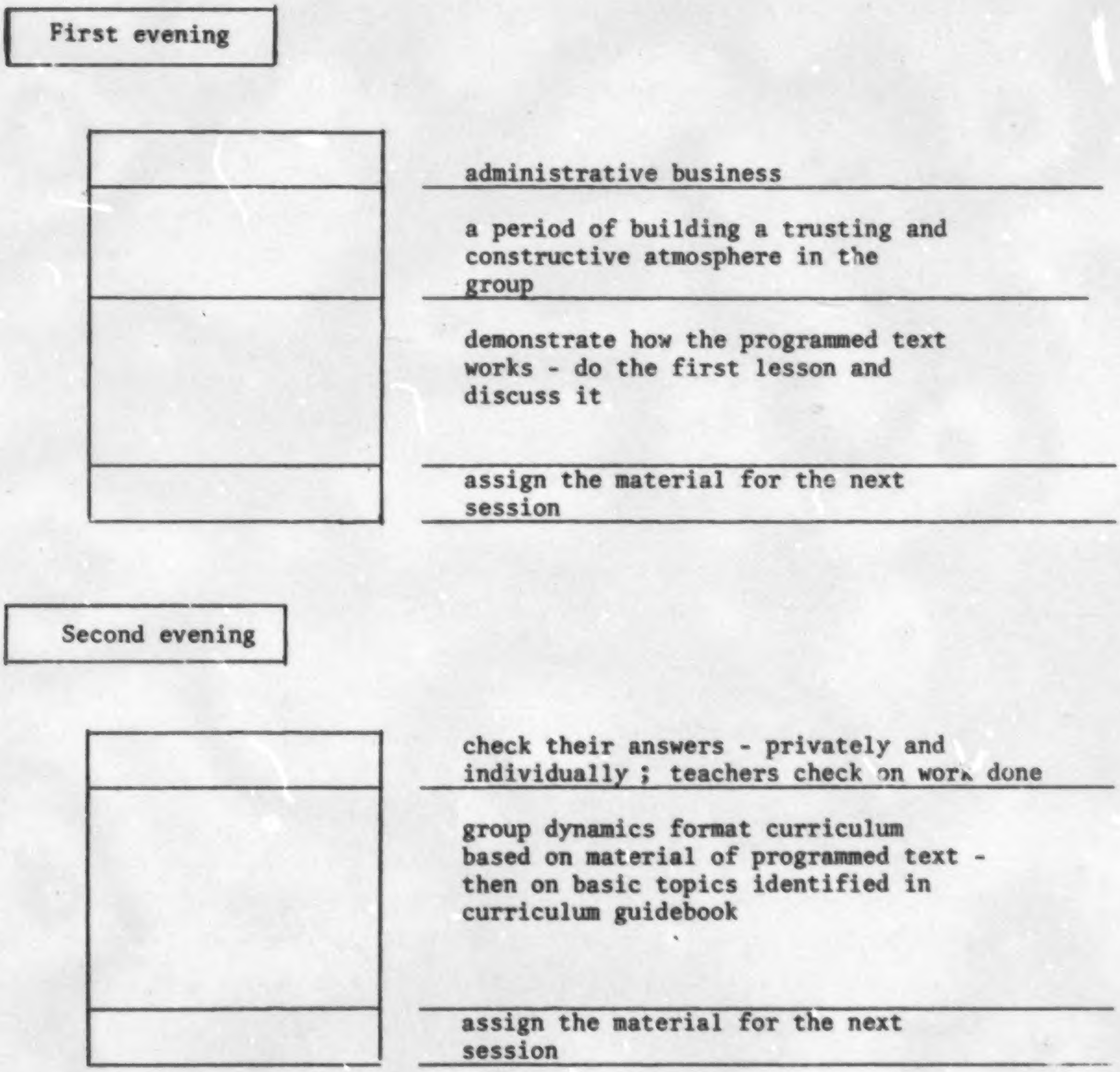

First evening
administrative business
a period of building a trusting and constructive atmosphere in the group
demonstrate how the programmed text works - do the first lesson and discuss it
assign the material for the next session
Second evening
check their answers - privately and individually ; teachers check on work done
group dynamics format curriculum based on material of programmed text - then on basic topics identified in curriculum guidebook
assign the material for the next session

Figure 9.1 Time Distribution in Sessions One and Two

The third through the seventh session are identical to the second session as shown in Figure 8.1. The program does not eliminate films, but it greatly reduces their use from what has been observed to be the general practice.

A Program Design

It is recommended that a program design be developed for each of the seven sessions or for specific blocks of time if the seven session scheduling design is not employed. Concrete suggestions should be set out which would provide a series of options for the selection of instructional strategies. The common character of these instructional strategies is the employment of the group dynamics format.

Earlier in this section, it was recommended that a committee be established to re-examine the existing curriculum and to develop both a fuller presentation of the rationale for the program objectives and a discussion of how these objectives may be realized in the instructional mode of group dynamics. The second major task of such a committee would be to set that curriculum within a program design.

When these materials have been prepared, it is recommended that they be included as part of the curriculum of the workshops for instructors. These workshops are described in the following section.

RECOMMENDATIONS FOR INSTRUCTION

Our analysis of the taped class sessions indicates that the instructors could benefit from in-service programs. Indeed, some have voiced the need for such education. Any criticism to such a recommendation came only in the form that such programs must not be didactic and superficial. They must be worth the time. That is, meaningful and substantive material should constitute the experience. The instructors want to be challenged with basic issues and sound educational practices.

With these requirements four sets of recommendations are proposed for the development of four dimensions to the training program. These four aspects are: 1) improving teaching through instructional analysis; 2) improving teaching through the increased understanding and application of group dynamics; 3) improving teaching through the understanding and facilitating of behavioral change; 4) the development of training films based on actual implementation of the new format set out in this proposal.

Instructional Analysis

In the pilot study, tape recordings were made of 24 instructional sessions in various locations in the State. Analyses of these recorded sessions showed that the teachers could benefit from an analysis of their teaching. The system of teacher behavior analysis which is recommended would give the teachers evidence as to their behavior as instructors in the classroom. Teaching the instructors how to do this self-analysis could help them to be better listeners and to improve their communication skills as teachers. Training materials and activities need to be developed which specifically address the needs of the instructors in the GD-TSS programs throughout the state. All existing materials and training exercises are designed for elementary and secondary school teachers. Thus, there is a need to allocate funds to underwrite the development of materials and training activities which speak to the fundamentals of good adult education.

Understanding and Application of Group Dynamics

The findings from the Evaluation Study clearly reveal that all instructors, to some degree, had significant difficulties in conducting the sessions in the instructional mode of group dynamics. The findings based on the analyses of the instructors' performances would indicate that within this representative group of instructors, only a limited number demonstrated a working knowledge of group dynamics. A review of the data on teacher roles, teaching styles and phase development most forcefully support such a conclusion. There is evidence of good practice, but this practice is not consistent. Such inconsistencies would raise the question of the level of basic knowledge and the level of awareness in applying group dynamic practices.

Some instructors during their interviews expressed a real need for help in learning more about group dynamics and in developing their skills as group leaders. Even those who expressed more confidence in their abilities stated that a rigorous workshop on group dynamics would be helpful.

It is recommended that a set of workshops be developed. These workshops should be structured to meet the different levels of competencies among the instructors. The first level workshop would be designed to help instructors with a limited knowledge of group dynamics. Level two would be organized to further the working knowledge of experienced instructors. The third level workshop would consider problems and issues which reflect a more advanced understanding of the dynamics occurring in the instructional group.

There is a general practice throughout the State that a newly hired instructor must first sit through an entire series of meetings of a group. This is a sound educational practice. It is recommended that in addition to this requirement the new staff member be enrolled in either level one or two workshop depending on his/her professional competencies. These workshops would be designed to supplement and complement the observational experiences the new staff member is obtaining. The workshops must be carefully designed and conducted by experienced and qualified professionals. The logistics of scheduling the workshops remains a problem to be resolved. It is reasonable to assume that the Department of Transportation, the Vocational, Technical and Adult Education Board and the coordinators of the GD-TSS program must be parties to setting up these workshops.

Facilitating Behavioral Change

The bottom line of succeess in the GD-TSS program is the positive behavioral change in the participants as it involves drinking alcohol and driving. For an instructor to facilitate a change in a participant's attitudes and behavior, he/she must have a working understanding of the motivations which support the participant's attitudes and direct his or her behaviors. Such an understanding can be derived from a comprehensive framework of motivation. Motivation refers to the set of basic forces that direct our lives. If the instructor cannot help a participant to discover these forces and to examine how they are directing his/her life, there is little likelihood that any change will occur. Until the motivation for our behavior is discovered, examined, and questioned, there is no basis upon which to expect a change in attitudes and in behavior.

The findings from the Evaluation Study do not show a consistent awareness on the part of the instructors concerning the motivation of the individual or the group. This is in part demonstrated by the low level of work and emotionality of the group. The instructors' psychosocial behaviors had a surprising high neutral and negative as compared to positive inputs. The expectation would be for many more positive statements than either negative or neutral statement from an instructor in adult education. The number of statements classified as negative in the role of facilitator is surprising and could not be expected to lead to an open learning environment where adults would examine basic personal concerns. The phase development of the groups also reflects the same type of data. The conclusion can only be that these results must be shared with instructors and that they be given the opportunity and help to improve in their abilities to facilitate learning.

Accordingly, it is recommended that funding be provided to develop instructional materials and workshop activities to assist the instructors in learning a comprehensive motivation framework. These materials and activities would be included as part of the workshops described in the previous section.

Development of Training Films

Several key instructional methods which are set out for the instructors to learn during the workshops will be new to them. What has been stated about the way participants learn holds equally for the instructors. Giving information to the instructors about these methods, having the instructors read about them, and even providing extensive periods of time to discuss these methods is not sufficient for the instructors to grasp the methods adequately enough to be able to implement them with some success. Therefore, it is recommended that training films or a set of video tapes be developed.

The development of these films (video tapes) would be accomplished through the following steps.

1. A regular GD-TSS class would be selected. The members would be asked to cooperate in developing a set of training films. The arrangement would be that all their

sessions would be carefully videotaped.

2. Parts of various sections of their class sessions would be selected.
3. To protect the participants' identities and to maintain their anonymity, actors would play their parts in the training films. That is, once the section to be used was identified, actors would take the parts of all members. They would reproduce the scene precisely (leaving out or changing all references to places and people) as it had been with the real participants.

The instructor for these training sessions would demonstrate accepted and effective group dynamic practices. The training films would be designed to show not only how the proposed curriculum and method would be implemented but to point out some problems an instructor could be expected to encounter and to provide possible solutions and opportunities for solutions to be generated. Such films would have a central role in the three levels of workshops.

FURTHER STUDIES

In the course of conducting the Evaluation Study, the need and benefits of conducting further investigations became most evident. These studies would include not only further analyses of the teaching and learning interactions but also longitudinal studies of participants and examination of the administrative aspects of the program. Some of the most prominent examples of such studies are proposed in the discussion which follows. There is no attempt here to present methodologies and designs for the studies which are suggested. The intention is solely to identify the areas for further study that logically follow and complement this Evaluation Study.

Teaching-Learning Interaction Studies

Although this Evaluation Study made substantial studies in observing and analyzing the dynamics of the instructional groups in the GD-TSS program, there remains many studies that should be conducted. The suggested studies that are briefly identified below provide several directions for further studies.

1. The variable of age should be systematically studied. The composition of the ten representative groups in the Evaluation Study was quite heterogeneous because these groups were formed to reflect the profile of the OWI population. There are occasions when the age range is not as great. Studying homogeneous age groups would provide valuable information.

2. The variable of sex should also be systematically studied. Although there were no attempts to isolate and study this variable in this Evaluation Study, it was commonly observed by the evaluation team that women made a difference in the dynamics of the groups which were observed. What that difference was cannot be adequately described at this time. The variable of sex is a factor about which the GD-TSS program should know much more than is known at this time.

3. The effects that serious problem drinkers have on other members of the class should be investigated. In connection with that is the question: What do instructors do to facilitate the potential of such learning situations?

4. This Evaluation Study discovered that there is very little teaching that is of the transactional style. This is surprising in view of the aims and purposes of the program. This result should be investigated further to determine what factors may explain this finding.

5. The different roles that the participants take in the group should be studied. These could be compared against the roles the instructors take as was reported in this Evaluation Study. The analysis of the students' roles would also provide insights into the distribution of roles among members, which roles are seldom taken and which are most frequent. The analysis of this distribution would give much valuable information of the roles instructors take and their relationships to the roles students take.

Longitudinal Studies

The Evaluation Study gathered a substantial amount of data on each participant. If the records of the Motor Vehicle Division of the Transportation Department could be made available a series of longitudinal studies on the participants could be conducted. Such studies could include:

1. A study on possible relationship between psychosocial attitudes and driving record over specific periods of time.
2. A study on possible relationships between reactions to GD-TSS group exprience and driving record over specific periods of time.
3. A follow-up interview on the long term reactions to the GD-TSS group exprience.
4. A follow-up study to examine whether participants had an effect upon or whether they changed their social environment to remove the influences that contributed to their drinking.
5. An in-depth interview to gather data on basic psychosocial attitudes in order to compare these with the basic attitudes they exhibited during the GD-TSS session. If changes were evident there would be efforts to determine what factors contributed to these changes.
6. A study on recidivism to determine whether there are relationships between certain basic psychosocial attitudes held by the participants.
7. A study on instructors to determine whether they make fundamental changes in their teaching progressive over-time from their experiences of teaching GD-TSS groups.

This list of studies is not intended to be an exhaustive list. These recommended studies are proposed as a sequential set of important studies following the Evaluation Study.

Administrative Factors

The examination and investigation of the administrative aspects of the GD-TSS program were not within the scope of the Evaluation Study. It is difficult if not impossible to separate from the instructional components of an educational program the administrative operations. If the GD-TSS program is to be fully understood and evaluated, the administrative structures and operations must be carefully and thoroughly examined and evaluated.

There are a number of studies which need to be conducted. The studies which are identified below are recommended as an outgrowth of certain observations that were made during the conduct of the *Evaluation Study*.

1. The in-take phase of the GD-TSS program needs to be carefully examined. The pre-session interview of each participant by the instructor would appear to be a valuable source of information for the instructor. If it were followed by a post-session interview, the instructor would then have a benchmark to assess progress. Although there are certain basic arguments that would support the adaption of such a practice, it should not be undertaken without a careful analysis of both administrative and instructional effects that such a practice may have on the program.

2. One of the basic programmatic issues that was apparent, even in the early stages of the *Evaluation Study*, was the conflicting role the instructor plays in the program. He/she is simultaneously a facilitator and a judge. That is, the instructor tries to help the participants to face up to the problems of drinking and driving. The participants need to trust the situation and the instructor to do this. Yet, on the other hand, the instructor is responsible for filing a report on each participant.

GENERAL PROGRAMMATIC RECOMMENDATION

This section concludes the broad range of recommendations set out in this chapter. There is only one recommendation in this section. It is proposed that the Department of Transportation seek the services of qualified professionals to direct the modifications in the curriculum and develop the materials and programs for the in-service workshops.

The many recommendations which have been set out in this chapter required much background work before they could be formulated into operational procedures. The development of materials for a systematic review and the writing of a documented curriculum requires the extended services of experts. The production of a program text is a highly specialized task. Add to these the structuring of well organized and profitable workshops requires the services of competent professionals. Such a team of professionals is clearly required. This team must work with coordinators, instructors, and personnel from the Transportation

Department. But it is unreasonable to expect that these working professionals be given the tasks of producing curricular statements, developing materials, designing programs, and structuring workshop formats in addition to their regular duties. As has been proposed earlier the reasonable and intelligent use of their competencies would be to establish a committee of coordinators, instructors, and government personnel to act in the developmental stage in advising and reviewing roles and then at the completion of the work to take the role as a recommendation committee to the State. It is therefore recommended that the Department of Transportation seek the services of a team of experts who could provide an integrated proposal that would expedite the recommendations set forth in this chapter.

SUMMARY

A careful reading of the findings presented in Chapters Two through Eight provides a reader with many insights into the operation of the instructional groups in the GD-TSS program. The findings presented in these chapters suggest an array of recommendations to any knowledgeable reader. The task of the evaluation team was to pull these findings together in such a way as to produce a coherent and comprehensive set of major recommendations. This was done by keeping in mind at all times the goals of the GD-TSS program as set out in the Standards document. The recommendations stand on their own in meeting these requirements. They are broad but they clearly reflect the many definite findings based on the various parts of the Evaluation Study. Repeatedly this report has tied the direction this study has taken with the goals and general thrusts of the GD-TSS program as officially given in the Standards document. This report ends with the realization that much has been explored in this study but that there is much that now needs to be done to make the program more effective. Nothing was uncovered to question the approach the GD-TSS program has adopted. The task is to make improvements where they are clearly indicated.

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